DOCUMENT RESUME

ED 437 891 HE 032 764

AUTHOR Johnson, Thomas Allen
TITLE The Effects of Higher Education/Military Service on Achievement Levels of Police Academy Cadets.
PUB DATE 1998-00-00
NOTE 166p.; Ed.D. Dissertation, Texas Southern University.
PUB TYPE Dissertations/Theses - Doctoral Dissertations (041)
EDRS PRICE MF01/PC07 Plus Postage.
DESCRIPTORS *Achievement Rating; Achievement Tests; City Government; Educational Research; *Higher Education; Licensing Examinations (Professions); *Military Service; Occupational Tests; Performance Factors; *Police Education; Predictor Variables; Role of Education; Statistical Analysis; Student Characteristics; Veterans
IDENTIFIERS *Police Science; *Texas (Houston)

ABSTRACT

This study compared levels of achievement of three groups of Houston (Texas) police academy cadets: those with no military service but with 60 or more college credit hours, those with military service and 0 hours of college credit, and those with military service and 1 to 59 hours of college credit. Prior to 1991, police cadets in Houston were required to have a minimum of 60 hours of college credit; however, following the Gulf War, an ordinance exempted military personnel from the 60-hour requirement. The study design was a one-way analysis of variance, with a five-year stratified sample of n=273 participants. Achievement levels were determined by scores on a reading comprehension test, a state licensing test, and a Civil Service examination, as well as by academic average, driving skills, and firearms performance. The study found that cadets without military service but with 60 or more credit hours scored higher on reading comprehension and state licensing and civil service examinations than the other two groups. Driving skill scores were not affected by either college hours or military service. Cadets with military experience performed better at firearms skills than those without military experience. Appendices include data tables, permission letters, and law enforcement statistical data. (Contains 76 references.) (RH)

Reproductions supplied by EDRS are the best that can be made
from the original document.

SCOPE OF INTEREST NOTICE
The ERIC Facility has assigned this document for processing to: HE
In our judgment, this document is also of interest to the Clearinghouses noted to the right. Indexing should reflect their special points of view. CE

ED 437 891

THE EFFECTS OF HIGHER EDUCATION/MILITARY SERVICE ON ACHIEVEMENT LEVELS OF POLICE ACADEMY CADETS

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Education in the Graduate School
of Texas Southern University

By

Thomas Allen Johnson

Texas Southern University

1998

Approved By

Lillian B. Poats
Chairperson, Dissertation Committee

Dean, The Graduate School

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
● Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
T. JOHNSON
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
1

HE 032 964

BEST COPY AVAILABLE

Approved by

Lillian B Poats — 11-30-98

Chairperson, Dissertation Committee — Date

Zheng Wang — 11-30-98

Committee Member — Date

Lonnie Sadler — 11-30-98

Committee Member — Date

Ralph B Butler — 11/30/98

Committee Member — Date

TABLE OF CONTENTS

Page

LIST OF TABLES....vi

VITA....vi

ACKNOWLEDGEMENTS....ix

DEDICATION....xi

ABSTRACT....xii

CHAPTER

1. INTRODUCTION....1
    - Statement of the Problem....3
    - Purpose of the Study....4
    - Significance of the Study....4
    - Research Questions....5
    - Hypotheses....6
    - Assumptions....8
    - Delimitations....8
    - Limitations....9
    - Definition of Terms....10
    - Organization of the Study....15

2. REVIEW OF RELATED LITERATURE 17

Historical Background.............................19

Theoretical Background............................23

Support for Higher Education......................26

Support for Military Service......................38

Summary...46

3. DESIGN OF THE STUDY 48

Research Design...................................49

Sampling Procedures...............................50

Independent Variables.............................50

Dependent Variables...............................51

Instrumentation...................................51

Data Collection Procedure.........................61

Analysis of Data..................................62

Summary...63

4. ANALYSIS OF DATA 65

Purpose of the Study..............................65

Research Questions................................65

Hypotheses..66

Sample..68

Demographics......................................69

Analysis of Data..................................70

Examination of Hypotheses......................71

5. SUMMARY, FINDINGS, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS................................103

Summary....................................103

Findings...................................105

Discussion.................................111

Conclusions................................118

Recommendations............................119

APPENDIX......................................122

A. Permission Letters.........................123

B. Law Enforcement Statistical Data...........129

REFERENCES....................................142

LIST OF TABLES

Table Page

1. The ANOVA Scores on the Reading Comprehension Scores 72

2. The Mean Scores on the Reading Comprehension Scores 73

3. The Achievement Levels by Groups on the Reading Comprehension Scores 74

4. The Percentage of Achievement Levels of Groups on the Reading Comprehension Scores.............75

5. The ANOVA Scores on the State Licensing Scores 77

6. The Mean Scores on the State Licensing Scores 78

7. The Achievement Levels by Groups on the State Licensing Scores 79

8. The Percentage of Achievement Levels of Groups on the State Licensing Scores...................80

9. The ANOVA Scores on the Civil Service Scores 83

10. The Mean Scores on the Civil Service Scores 84

11. The Achievement Levels by Groups on the Civil Service Scores 85

12. The Percentage of Achievement Levels of Groups on the Civil Service Scores...................86

13. The ANOVA Scores on the Academic Average Scores 88

14. The Mean Scores on the Academic Average Scores 89

15. The Achievement Levels by Groups on the Academic Average Scores 90

16. The Percentage of Achievement Levels of Groups on the Academic Average Scores..................91

17. The ANOVA Scores on the Driving Skill Average Scores 93

18. The Mean Scores on the Driving Skill Average Scores 94

19. The Achievement Levels by Groups on the Driving Skill Average Scores 95

20. The Percentage of Achievement Levels of Groups on the Driving Skill Average Scores 96

21. The ANOVA Scores on the Firearms Skill Average Scores 98

22. The Mean Scores on the Firearms Skill Average Scores 99

23. The Achievement Levels by Groups on the Firearms Skill Average Scores 100

24. The Percentage of Achievement Levels of Groups on the Firearms Skill Average Scores 101

VITA

February 26, 1962	Born - Port Arthur, Texas
1982 & 1984	Congressional Research Intern U.S. House of Representatives Washington, D.C.
1984	B.S., Sam Houston State University Huntsville, Texas
1984-1986	Police Officer-Patrol Houston Police Department
1986-1988	Coordinator-DARE Program Houston Police Department
1988-1990	Command Administrative Officer Houston Police Department
1989	M.S., Sam Houston State University Huntsville, Texas
1990-1993	Manager-DARE Program Houston Police Department
1993-Present	Training Administrator-Academy Houston Police Department
Major Field	Higher Education

ACKNOWLEDGEMENTS

This investigation was possible because of the support of my dissertation chair and committee. Dr. Lillian Poats, Committee Chair, has provided me with the knowledge and strength to continue with this long and winding process. Dr. Poats has been my friend and confidant from my first semester at Texas Southern University. She has guided me, challenged me, and helped me realize that I could earn the coveted doctoral degree.

Dr. Sadberry, Chair of the Department of Educational Leadership and Counseling, provided me the road map that I followed closely. He has an uncanny ability to slice through the fluff and give a student what they need to know in order to function as a doctoral student.

I thank, Dr. Ralph Butler, the professor who took statistics from being just numbers into a world of understanding and clarity. I have admired him for his wisdom and friendship through this long process.

Dr. Zheng Wang stepped up when I needed an outside professor to sit on my committee. I wish to thank him for the hours he has given me in my quest to graduate. He has an understanding that has helped me in this task.

A special thanks goes out to the Houston Police Department and its members and co-workers for support and allowing me to conduct this study. I am grateful to Chief Clarence Bradford and Mayor Lee P. Brown for their leadership and foresight on the need for law enforcement research.

Finally, I wish to thank my wife, Karen, and children, Courtland and Emily, who have allowed me to pursue the doctorate. Without their understanding and support, I would not have been able to finish.

DEDICATION

This dissertation is dedicated to my parents, Otis and Margie Johnson. They are my greatest teachers and have continuously supported my quest for education. I love you both.

ABSTRACT

The purpose of this investigation was to examine police cadets and analyze their achievement levels while in the controlled environment of the Houston Police Academy. Specifically, the investigator sought to determine the level of achievement by police cadets who possessed, (1) No military service and 60 or more semester hours of college, (2) Military service and 0 semester hours of college, or (3) Military service and 1-59 semester hours of college.

A statistical design was employed utilizing a one-way Analysis of Variance (ANOVA) with a post-hoc Scheffe' test to determine significance at the .05 level. The investigation utilized a five year stratified random sample with an "N" count of 273. The investigation examined cadets scores on their: Reading Comprehension Test, State Licensing (TCLEOSE) Test, Civil Service Test, Academic Average, Driving Skill Average, and Firearms Skill Average.

The investigation revealed that cadets with no military service and 60 or more semester hours of college had statistically significant higher scores than cadets with prior military service and 0 semester hours of college on the: Reading Comprehension Test, State Licensing (TCLEOSE) Test, Civil Service Test, and Academic Average. There was not a statistically significant difference between any group in relation to Driving Skill Averages. Finally, cadets who had prior military service and 1-59 semester hours of college had statistically significant higher scores on their Firearms Skill Averages than non-military cadets.

Chapter 1

INTRODUCTION

The value of higher education is its ability to equip individuals to think and analyze situations theoretically as well as diagnose the task at hand. Higher education raises a person's communication abilities and interpersonal skills, enhancing their professional persona. These skills are vital in a career in law enforcement where an officer has the capability of depriving a citizen of their life, liberty, and freedom.

Police officers in America carry out their duties in a dynamic, diverse, and free society. They must balance the rights of an individual with the laws imposed by governmental entities. The police officer in modern America must be a social worker, counselor, investigator, community liaison, drug expert, peace protector, and arresting officer. It is of paramount importance that police officers conduct themselves as sensitive professionals while enforcing the laws of society.

It is toward this need for professional police officers that a significant body of literature has been developed and researched over the past thirty years. Scholars point to Lyndon Johnson's establishment of the Presidents Commission on Crime in 1967, as the foundation, which the professional police officer was built. The commission called for higher education as a prerequisite for being a professional police officer. Grant (1995) extracted the following poignant quote from the commission's report. "One incompetent officer can trigger a riot, permanently damage the reputation of a citizen, or alienate a community against a police department" (p. 125).

Because of the 1967 Presidential Commission, leaders in the field of criminal justice such as Lee P. Brown, D.L. Carter, A.D. Sapp, D.W. Stevens, and Patrick Murphy had a national platform to conduct studies, establish task forces, and speak out on the need for higher education to professionalize the American police force. The quest toward a broad minded, well-educated police officer has taken root and proliferated in the subsequent thirty years.

The impetus of this investigation was to examine higher education as an essential component for a career in law enforcement. As with any large metropolitan law enforcement agency the preparing of officers begins with the basic training, which is conducted in a police academy.

More specifically, the investigator examined the Houston Police Academy, which is charged with the responsibility of training Houston Police Officers. The academy is an intensive twenty-six week program designed to turn new recruits (cadets) into officers. While the cadets are in the academy, they are given a series of internal and external examinations as well as technical skills tests to measure their mastery of concepts and skills.

Statement of the Problem

To determination whether or not there was a statistically significant difference between the achievement level at the Houston Police Academy between cadets who have sixty hours or more college credit and cadets who are admitted via the military service waiver. The statement of the problem was evaluated by grouping police cadets into three differing levels of education and/or military service. The groups included those with sixty or more college hours, 0 college hours and 1-59 college hours. The investigator measured the achievement levels of these three differing groups.

Purpose of the Study

The purpose of the investigation was to compare the level of achievement by cadets who have no military service and sixty hours or more college credit to cadets who have military service and either 0 hours or 1-59 hours of college credit. The three differing groups were measured on their reading comprehension examination, State Board of Licensing, Civil Service examination, academic performance, driving skills, and firearms performance.

Significance of Study

Prior to 1991, a prospective police cadet had to have a minimum of sixty hours college credit to enter the Houston Police Academy. However, shortly after the Gulf War in 1991, the Houston City Council passed an ordinance exempting military personnel from the sixty-hour requirement.

It has now been over seven years (February 6, 1991) since the Houston City Council passed the ordinance repealing the sixty-hour minimum college requirement that had been in effect since October 5, 1989 (Robinson, 1991). This was the first investigation into the achievement levels of those individuals who entered the Academy via the military waiver.

The investigation into the military waiver as an entrance method into the Houston Police Academy was a worthy endeavor and provided new knowledge in the field of educational research and law enforcement. The research sheds some insight as to whether or not there was a statistically significant difference in the level of achievement between cadets who were admitted to the Houston Police Academy by their educational credentials or the military waiver.

Research Questions

The following research questions are in this study.

1. Does the number of college credit hours and/or military service affect the reading comprehension scores by cadets in the Houston Police Academy?
2. Does the number of college credit hours and/or military service affect state licensing scores by cadets in the Houston Police Academy?
3. Does the number of college credit hours and/or military service affect Civil Service scores by cadets in the Houston Police Academy?
4. Does the number of college credit hours and/or military service affect the academic average scores by cadets in the Houston Police Academy?

5. Does the number of college credit hours and/or military service affect the driving skills average scores by cadets in the Houston Police Academy?
6. Does the number of college credit hours and/or military service affect the firearms skills average scores by cadets in the Houston Police Academy?

Hypotheses

The following hypotheses were tested in this investigation.

Ho_1: There is no statistically significant difference in the scores of cadets with no military service and at least 60 hours of college credit and cadets who have military service with either 0 hours or 1-59 college hours regarding reading comprehension scores.

Ho_2: There is no statistically significant difference in the scores of cadets with no military service and at least 60 hours of college credit and cadets who have military service with either 0 hours or 1-59 college hours regarding state licensing scores.

Ho_3: There is no statistically significant difference in the scores of cadets with no military service and at least 60 hours of college credit and cadets who have military service with either 0 hours or 1-59 college hours regarding Civil Service scores.

Ho_4: There is no statistically significant difference in the scores of cadets with no military service and at least 60 hours of college credit and cadets who have military service with either 0 hours or 1-59 college hours regarding academic average scores.

Ho_5: There is no statistically significant difference in the scores of cadets with no military service and at least 60 hours of college credit and cadets who have military service with either 0 hours or 1-59 college hours regarding driving skills average scores.

Ho_6: There is no statistically significant difference in the scores of cadets with no military service and at least 60 hours of college credit and cadets who have military service with either 0 hours or 1-59 college hours regarding firearms skills average scores.

Assumptions

The following basic assumptions were considered to insure the validity of the investigation.

1. It was assumed that all subjects who took the examinations being investigated answered to the best of their ability.
2. It was assumed that all subjects were randomly drawn from the population and the data captured has a normal distribution.
3. It was assumed that all of the subjects selected for the sample were homogeneous in nature insuring subject similarity.

Delimitations The investigator was convinced that a randomized stratified sample was accurate and sufficient to validate and generalize to a larger population. The population in this study was the five-year period that includes all of the individuals who graduated between 1992 and 1996. To ensure that all subjects were subject to all of the dependent variables certain individuals were delimited from the investigation. Subjects not included in the investigation include:

1. All individuals who had military service and more than sixty college hours (they could have entered under either policy).
2. All previously certified peace officers (they did not take all tests).
3. All non-graduates from the police academy (they may not have taken all tests). However, the number of cadets who did not graduate from either entrance method is listed in Chapter 3. The low number of non-graduates should not affect the results.

Limitations

It should be noted, however, that a sample is not an entire population and may yield statistics that have a slight margin of error. Moreover, it should be pointed out that the examinations that each class took were similar in difficulty and structure but was not the exact same examinations. Additionally, this investigation studied only one police department, the Houston Police Academy. Since only the Houston Police Academy was examined the investigation had a narrow scope and limited possible generalizations to other police academies. Nonetheless, the basic premise was sound and the methodology could be replicated in other police academies. Finally, this study focused on correlations between educational levels and academy training performance not their field performance.

Definition of Terms

The following terms used in the study are defined.

Academic Average Scores. Academic standards in the Houston Police Department are governed by state statute, but are controlled by department policy. The academic testing portion of the academy was standardized and consisted of eight primary examinations and seven quizzes. The Academy recognizes seventy percent as the minimum score to pass examinations in all areas of academic training. The examinations and quizzes are taken from the following subjects (Webb, 1994):

> Community service, communications, evidence, patrol procedures, penal codes, psychology of policing/stress management, fingerprint identification, ethics, conflict resolution, homicide investigation, sex crime investigation, special thefts, narcotics investigation, offense report writing, nutrition, forgery investigation, interview and interrogation, robbery investigation, human relations, juvenile investigation, burglary and theft investigation, crime scene protection and search, bomb threat investigation, family violence, defensive driving, officer safety/use of force, traffic laws, emergency mobilization and crowd management, radio procedures, jail operations, communications for

> the hearing impaired, computer aided dispatch, crime analysis, hazardous material recognition and response, emergency vehicle response and liability, key map, laptop computer training, toxicology, mental health warrants, courtroom demeanor, recognizing and handling abnormal people, UNISYS mainframe computer training, mobile data terminal training, code of criminal procedure, family law, DWI investigations, arrest, search and seizure, laws of evidence, civil laws, first responder, departmental general orders/forms, and traffic collision investigation. (p. 35)

Academy. The division within the Houston Police Department charged with the responsibility of training individuals to become police officers and providing in-service training to incumbent officers and civilians.

Cadets. Newly hired personnel who are trained to become police officers for the Houston Police Department.

Cadet Hiring Criteria. The basic criteria that must be satisfied and met in order to become a Houston Police Officer (HPD/Recruiting, 1994) includes:

1. Having a minimum of sixty college hours from an accredited college or university with a "C" average/or honorably discharged from the military.
2. Be 21-35 years of age.
3. Must be a citizen of the United States of America.
4. Have weight in proportion to height.
5. A valid driver's license and proof of liability insurance.

6. Overall driving record reflective of a history of prudence and maturity in operating a motor vehicle.

7. Never convicted of a felony.

8. Stable credit history, family background, and employment background. Character and reputation of the highest order.

9. Free of any drug decencies.

10. Pass an extensive polygraph examination. (p. 1)

Civil Service Examination. Cadets are required to pass the City of Houston, Civil Service examination prior to graduation from the Houston Police Academy. The test is a knowledge-based comprehensive examination given at the end of the academy covering all subjects taught. The questions are extracted from the Houston Police Academy test bank. The examination must be passed with a score of at least seventy percent in order to be licensed as certified Peace Officer for the City of Houston.

Demographics. The demographics of the research included both male and female cadets as well as various race and ethnic groups.

Drivers Training. The drivers training components are conducted at the Houston Police Academy. The driving portion consists of fifty hours of hands-on and fourteen hours of classroom instruction. The hands-on portion utilizes two different drivers tracks: a figure eight fast track designed for performance driving and a precision pad where vehicle-handling techniques are practiced at variant speeds and obstacles.

The classroom portion included an eight-hour Defensive Driving Course (DDC) and six hours of lecture on driving the figure eight fast track and precision pad courses. All cadets must have successfully completed this portion as part of the training program. The Academy recognizes seventy percent as the minimum score to pass examinations and master skills in all areas of drivers training.

Firearms Training. All cadets must satisfactorily complete the Tactical Firearms Training Program before they graduate form the Houston Police Academy. The program consisted of the successful completion of the Handgun Qualification Course, Shotgun Qualification Course, Stress course, Night Firing Course and the written examination. The Academy recognizes seventy percent as the minimum score to pass examinations and master skills in all areas of firearms training.

Houston Police Department. The law enforcement agency authorized and sanctioned under state law to maintain the peace and dignity for the city limits of Houston, Texas.

Length of the Academy. The Academy is an intensive twenty-six week program consisting of numerous internal and external examinations as well as technical tests to measure mastery concepts.

Reading Comprehension Examination. The examination consisted of paragraphs based on materials that cadets are required to read and/or study in the police academy. The individual must read the passage and then make logical choices about what the paragraph means. The reading comprehension examination is designed to measure the person's ability to read and understand written English. The examination is not designed to test their root knowledge of law enforcement. It is very similar to the English Proficiency Examination given by colleges and universities.

Each cadet must score at least a 15 on a standardized reading comprehension examination in order to be admitted to the Academy. A score of fifteen is equal to a minimum of a ninth grade reading level. Four versions of the reading comprehension examination were custom designed and validated by Jeanneret and Dubin (1977) for the Houston Police Department based on job content analysis. For the purpose of scaling, all scores are translated into a 100 point scale in order to match the other five examinations.

State Licensing Examination. Each cadet is required to pass the Texas Commission on Law Enforcement Officer Standards and Education (TCLEOSE) examination prior to graduation from the Houston Police Academy. This examination must be passed with a score of at least seventy percent in order to be licensed as certified Peace Officer for the State of Texas. The content of the TCLEOSE curriculum centers around thirty-three objectives which include the following (TCLEOSE, 1997):

> Fitness and Wellness, History of Policing, Professionalism and Ethics, U.S. & Texas Constitutions and Bill of Rights, Criminal Justice System, Code of Criminal Procedure, Arrest, Search & Seizure, Penal Code, Traffic Code, Civil Process and Liability, Texas Alcoholic Beverage Code, Drug Identification, Juvenile Issues, Stress Management for Peace Officers, Field Note-taking, Interpersonal Communications, Report Writing, Use of Force Concepts, Strategies of Defense-Mechanics of Arrest, Strategies of Defense-Firearms, Emergency Medical Assistance, Emergency Communications, Problem Solving and Critical Thinking, Professional Police Driving, Multicultural and Human Relations, Professional Policing Approaches, Patrol, Victims of Crime, Family Violence and Assault Offenses, Recognizing and Interacting with Persons with Mental Illness and Mental Retardation, Crowd Control Management, Hazardous Materials Awareness, as well as Criminal Investigation. (p. 3)

Organization of the Study

The investigation is organized into five chapters.

Chapter one presents the introduction, statement of the problem, purpose of the study, significance of the study, research questions, hypotheses, assumptions, demographics, delimitations, limitations, definition of terms and organization of the study. Chapter two consists of a review of literature, historical background, theoretical background, and related research as well as a summary of literature. Chapter three describes the design, sampling procedures, independent and dependent variables, instrumentation, collection of data and design summary. Chapter four was where the investigator conducted an analysis of the data gleaned from the study. Finally, Chapter five consists of a research summary, findings, discussion, conclusions and recommendations made from the investigation.

Chapter 2

REVIEW OF RELATED LITERATURE

The law enforcement officer in today's society is faced with a myriad of tasks and responsibilities in preserving the peace of their community. Law enforcement officers by position have a great deal of power and must be trained to temper that power with good judgement and values toward the citizens they serve.

Emmons and Nutt (1995) paint a vivid picture of the complex quagmire that the criminal justice system must function in. They state, "Criminal justice is overwhelmed with issues and controversies regarding values. The problem of crime, its endemic nature in our society, the contest between good and evil, the drama of risk and violence, the coercive powers of police, courts and prisons, and the law as a reflection of morality all speak to the importance of value issues in criminal justice" (p. 147).

Saunders (1983) in More's Critical Issues in Law

Enforcement points out, that without proper selection and training, police officers are stereotyped as "dumb cops." This stereotype needs to be shattered because ". . .law enforcement is an occupation demanding a high order of skills and intelligence" (p. 30).

This investigation looked at potential police officers (cadets) and analyzes their achievement levels while in the controlled environment of the Houston Police Academy. Specifically, the investigator sought to determine the level of achievement by police cadets who have no military service and at least sixty hours or more college credit versus cadets who have military service and either 0 hours or 1-59 hours of college credit. The three differing groups of cadets were measured on their reading comprehension scores, state licensing scores, civil service scores, academic average scores, driving skills average scores, and firearms average scores.

The hope of this investigation was to seek new knowledge for the field of law enforcement and higher education. Thereby, enlightening public policymakers and educators alike in bench-marking the achievement levels of those individuals who have attended the Houston Police Academy.

Historical Background

The historical quest toward reform and raising the basic standards for becoming a police officer in America can be traced back to the turn of the Twentieth Century (Kessler, 1994). Dantzker (1995) points to early reference in 1917, where "August Vollmer proposed that a 36-month college program in police education be completed by all police officer candidates before going into active service" (p.1). Since that proposal, several commissions have promoted Vollmer's concept of college education.

Swanson (1988) named three commissions that made significant impact on the future of law enforcement: the Wickersham Commission, 1931; the President's Commission on Law Enforcement and the Administration of Justice, 1967; and the National Advisory Commission on Criminal Justice Standards and Goals, 1973. The latter made the following recommendation: "Every police agency should no later than 1982, require as a condition of initial employment the completion of at least 4 years of college education (120 semester hours or a baccalaureate degree) at an accredited college or university" (Swanson, 1988, p. 211).

Breci (1994) builds on the foundation of Lyndon Johnson's 1967 President's Commission on Law Enforcement and the Administration of Justice in Higher Education for Law Enforcement-The Minnesota Model. Breci writes,

> The President's Commission accurately predicted that the complexities of policing would require higher levels of education. Indeed, since the 1960's policing has become increasingly complex. For example, many police agencies have implemented community policing, which is based on the premise that police officers can better address crime problems by examining complex social issues and developing solutions that involve the police and the community working together. Effective community policing requires skills officers acquire through higher education, research, critical thinking, problem solving, effective oral and written communication, and an understanding of group and community dynamics. (p. 1)

The process of upgrading selection standards has been slow to evolve in law enforcement but is making progress. Geller, (1991) reports nationally ". . .that the educational level of the police increased from an average of 12.4 years in 1967 to 14 years in 1988" (p. 45). Thus far, Minnesota is the only state that "requires prospective law enforcement officers complete a 2-year degree program in order to be licensed" (Breci, 1994, p. 1).

The investigator has attached a comprehensive list in the appendix section of the dissertation that was taken from Reaves and Smith (1995) report on the educational requirements of all police agencies in the United States with 100 or more officers. In 1995, the Texas Commission on

Law Enforcement Standards and Education (TCLEOSE) reported on the educational level of police officers in Texas. The TCLEOSE findings are as follows:

High School Grad.	GED	Some College	No High School
28,669	5,804	36,920	235
40%	8%	51%	>1%

Goldstein (1990) reinforced the call for higher education in law enforcement by stating, administrators should ". . .give higher priority to applicants who demonstrate an ability to function independently; who enjoy and are adept at solving problems; who are creative and imaginative; who can make good judgements in choosing from among a range of available alternatives; and who, in a general way, have the intellectual capacity to do more thinking about police work" (p. 166).

Robert Reich, Secretary of Labor (1994), describes the increasing need and value of higher education. Mr. Reich believes that America is facing a widening gap between those with higher education and those without it. He speaks to the fact that "you have to educate the people and you have to be educated. . .If people don't understand what you're doing or why you're doing it, it will not get done—or it cannot get done" (p. 12).

President Truman saw the need for effective higher education in the future and appointed the 1946 Commission on Higher Education. Westmeyer (1985) points out that the commission, later known as the "Truman Commission" wrote the following needs for higher education in America:

> 1. Education for a fuller realization of democracy in every phase of living.
> 2. Education directly and explicitly for international understanding and cooperation.
> 3. Education for the application of creative imagination and trained intelligence to the solution of social problems and to the administration of public affairs. (p. 104)

Steeples (1995) cites three goals of higher education according to R. Weingartner in his article in Liberal Education that extols the virtues of higher education. Mr. Steeples writes:

> Weingartner identifies as the first goal, to be shared by all institutions of higher education, the nourishment in students of certain qualities of mind "that were classically known as intellectual virtues." These include such things as the capacity to suspend judgement in the absence of adequate evidence, cultivation of depth of understanding, even the ability to make "courageous moral decisions." A second set of goals embraces cultivation of certain skills or proficiencies to include critical thinking, fluent expression, and competent calculation, among others. A third set of goals is comprehended in the term "conversancy," which involves an appropriate familiarity with the basic information, modes of thinking, and methods of investigation by which to know about nature and human culture. (p. 62)

The changing dynamics of a complex society demonstrates the need for higher education in order to function competently and promote within an organization (Johnson, 1994). The idea of an individual to think in the broadest terms brings to the forefront the basic question of whether or not higher education should be required as a prerequisite to enter a public profession such as law enforcement.

Finally, it has been over seven years (February 6, 1991) since the Houston City Council passed an ordinance repealing the college requirement and providing a military service exemption for individuals to enter the police academy. The sixty-hour minimum college requirement for entrance into the police academy had been in effect since October 5, 1989 (Robinson, 1991). Prior to 1989, an applicant merely needed a General Educational Development diploma to enter the academy. This investigation sought a determination in the question relative to academic achievement levels of both groups in a controlled environment.

Theoretical Background

The assumption by many scholars as documented in the related review of literature suggested that an individual with a higher education may have a higher achievement rate than someone without higher education. The crux of this investigation was to determine if military service can substitute for higher education on the cadet's level of achievement.

Jose Sanchez, Chief of Police of the Uvalde Police Department wrote that, "For many years the law enforcement profession has wrestled with the issue of whether or not a college education is needed in police work. To this day, there is not a consensus on the subject" (Sanchez, 1996, p. 17).

In building a case for college educated officer's Heidingsfield (1995) suggested some reasons for higher education as a prerequisite. He gave the following logic for having college-educated officers,

> 1. The ability to conceptualize, embrace, undertake, and fulfill the often intangible and ill-defined processes of community policing seems greatly enhanced when officers have a college education.
> 2. In many communities, the majority of adult residents are college educated, and there is an unspoken but prevailing presumption that the officers who serve these citizens should as a matter of course, have equivalent education.
> 3. While there will always be the three-way debate about the relative merit of life experience, formal education and human maturation, only the baccalaureate process synthesizes all three dynamics.

> 4. These officers help us close the circle in our pursuit of the professional recognition and stature we have sought for so long as an industry. (p. 5)

The presumptive theory was that the group with sixty hours or more college credit hours would score significantly higher on educational areas such as the pen and paper tests; while the military group would score significantly higher on the technical skill areas such as driver training and firearms. Additionally, it was suspected that the group that possesses military service and some college credit hours would fall somewhere in between the two extreme groups (Kindel, 1997). In summary, there has not been an investigation into the military waiver enacted by the Houston City Council in 1991 (Robinsion, 1991), to determine if there was a statistical significance between these groups of cadets concerning their level of achievement.

Law enforcement futurists Levin and Broadfoot (1996) state, "Law enforcement will of necessity have officers who are better educated, and more broadly trained, and they will have lots of new tools" (p. 11). The theoretical question of this study was to see whether the new "non-service specific training" in the military could equate to higher education in achievement levels of police cadets (Roos, 1997, p 22).

Support for Higher Education

Stephens (1990) states, "...policing in the future will feature expanded uses of technology; proactive, problem-oriented policing; and a decentralized, non-militaristic organizational structure" (p. 151). The challenge of a modern police academy is to train and shape future officers for the ever-changing dynamics of a free society. These challenges come from a growing racially-diverse community, the rise in the number of languages spoken, understanding various social issues and technological advances. Therefore, it is incumbent upon the police academy to prepare and equip the individual for the on-the-job field training, which awaits them upon graduation.

The futurist trend toward a less military type of structure will truly be a radical departure from the traditional police force of the past. Abshire (1995) notes that law enforcement was based on the military and included a ". . .centralized power structure, the top-to-bottom flow of commands, the use of a rank system, impersonal relationships, strict expectations of obedience, and an emphasis on the lack of options present in the work" (p. 13.)

The futurists beliefs are reinforced by, Linkins (1995) in her article entitled, Training for the Future. Linkins wrote the following passage describing the new law enforcement curriculum she recommends,

> The world is changing at a rapid pace both technologically and socially. All professions will require well-educated and highly trained personnel to meet the needs of the future, and the criminal justice field is no exception. By mapping out the present state of the art in law enforcement standards and training, the IDALEST Sourcebook can help criminal justice agencies nationwide chart the course for the future. (p. 1)

Patterson (1991) sought to underscore the need for higher education to cope with the new type of officer needed in a traditionally militaristic environment. He discussed how higher education broadens a person's mind to think critically and analyze occurrences from several viewpoints. Additionally, from this expanded knowledge base a college-educated officer would perform at a higher level in oral or paper and pencil test taking. Webb (1994) describes the curriculum topics at the Houston Police Academy:

> Community service, communications, evidence, patrol procedures, penal codes, psychology of policing/stress management, fingerprint identification, ethics, conflict resolution, homicide investigation, sex crime investigation, special thefts, narcotics investigation, offense report writing, nutrition, forgery investigation, interview and interrogation, robbery investigation, human relations, juvenile

> investigation, burglary and theft investigation, crime scene protection and search, bomb threat investigation, family violence, defensive driving, officer safety/use of force, traffic laws, emergency mobilization and crowd management, radio procedures, jail operations, communications for the hearing impaired, computer aided dispatch, crime analysis, hazardous material recognition and response, emergency vehicle response and liability, key map, laptop computer training, toxicology, mental health warrants, courtroom demeanor, recognizing and handling abnormal people, UNISYS mainframe computer training, mobile data terminal training, code of criminal procedure, family law, DWI investigations, arrest, search and seizure, laws of evidence, civil laws, first responder, departmental general orders/forms, and traffic collision investigation. (p. 35)

The academy also includes the mastery of various technical skill areas. These additional areas are officer safety, performance driving, and firearm proficiency.

Good training and implementation of hands-on skills play a vital role in law enforcement, especially for new police officers. Police officers spend the first part of their career in patrol placing themselves on the frontline to protect the citizenry. Jones (1994) points out the legal need for good police training in a modern society.

> Law enforcement agencies have come under increased scrutiny in recent years concerning issues of public safety and accountability. Once, state law, drafted in a bygone era, and long-standing historical practice, were the sole arbiters of officer conduct and actions. Now all law officers face a litany of constitutional restraints, court

> rulings, laws and policies and procedures governing their actions. Use of force, particularly deadly force, has become an increasingly controversial issue throughout the country. Contemporary law enforcement agencies now must respond to a strict standard of officer conduct and use of force that was unheard of even a few years. (p. 1)

Alber (1995) believes it is incumbent on police academies to prepare cadets for conflict situations and provide them with the skills necessary to handle them. The use of effective language skills reduces tension and provides a safer atmosphere for a police officer to work. This is of importance since most of police officer's time is not spent chasing after criminals, but instead communicating and providing services for the community.

O'Keefe (1989) found in his analysis that actual high-speed pursuits by police officers are very rare and lasts only a few seconds. Officers with less experience are the individuals most likely to get into high-speed pursuits. It is from these pursuits that serious accidents happen to police officers as well as citizens. These accidents reinforce the need for police academies to train cadets extensively in pursuit driving.

Officer safety and firearms are also taught to cadets to prepare them for the "real world" of policing. These skills are necessary to protect the officers from serious or deadly situations as well as saving the lives of others in the community.

Goldstein (1977) describes the need for officers to exercise wise discretion and the need for agencies to have good policies dealing with firearms. In describing the fine line between officer discretion and departmental policy he states that, ". . .initially police guidance in some areas [such as deadly force] must be general and, as a result, vague" (p. 123). Laws, rules, and policies on deadly force are difficult to spell out because each critical situation is different. This means reliance on an officer to act in a prudent and ethical manner is important in a free society.

The combination of an academic and skills based curriculum seeks to lay a strong foundation for an officer to build a professional career. The concept of a professional law enforcement officer has given rise to an ardent recruiting question. What are the prerequisites needed to be a good police officer in a modern society?

The participants in the 1967 Presidential Commission on Law Enforcement and Administration of Justice mentioned earlier were tasked with providing recommendations on the future of policing in America. The commission generated several reports and recommendations including requiring higher education in order to become a law enforcement officer in America. "The basis for these recommendations was the increasing complexity of police tasks, coupled with police officers need for a strong foundation on which to base many critical decisions while policing the community" (Carter, Sapp, 1991, p. 1).

However, according to Sanchez (1996), the issue of higher education as a "requirement" has not been embraced by Chief's of Police in Texas. In fact, Sanchez found in his research that only 13.7% of Texas police departments require some type of higher education.

It is within the vein of upgrading police officer standards that Lee P. Brown, Mayor and former Police Chief in Houston, Texas sought and implemented higher educational requirements during his tenure. Due to Lee Brown's efforts the Houston City Council approved a requirement calling for sixty hours of college credit to be admitted to the Houston Police Department. The sixty-hour college credit requirement was implemented in 1989, with Cadet Class #136 (Brown, 1989). The requirement of sixty hours of college credit was a quantum leap from the existing requirement of a General Educational Development (GED) diploma to enter the academy.

Lee Brown, early in his career, called for an educated officer in a modern society. His belief of excellence in policing was based on the importance of well-trained officers being led by enlightened leaders (Brown, 1988). The well-educated officer that Brown espouses, brings the police and citizens together, thereby reducing crime and opening lines of communication and trust (Brown, 1992). This need for a well rounded educated officer can be seen in a memorandum by Lee Brown (1975), then Sheriff of Portland, Oregon, to the U.S. Department of Justice concerning the need for a "generalist investigator" to increase the quality of police service to the community. Later as Chief of the Houston Police Department, he coined the term "Neighborhood Oriented Policing" which is a strategy that gives priority to the prevention and control of crime through cooperation between police and community (Brown, 1988).

In an article addressing the Twenty-first Century Brown (1989) issued the following challenge to law enforcement administrators:

> In order to function in a society characterized by massive socioeconomic problems...we need a new police [officer]--one who understands the complexities of human life--one who is able to understand the legacy of discrimination in this country and reflect positively upon the demands for freedom, justice and equality; one who is able

> to understand the philosophy of dissent; one who understands that [he/she] has a legal moral obligation to be responsive to the people--all the people and not merely the prevailing power structure in the [officer's] community. (p. 13)

Shortly after the sixty-hour entry requirement was implemented, Lee Brown was offered and accepted the position of Police Commissioner in New York City. The new Chief of Police of the Houston Police Department was Elizabeth M. Watson. Chief Watson, herself a pioneer, became the first female to head a large metropolitan police agency in the United States and possessed a college degree (Hair, 1992). Chief Watson like her predecessor, Lee P. Brown, believed that higher education was vital in order to make law enforcement more professional.

The philosophy of higher education in law enforcement has been slow to evolve. However, in a literature review conducted by Carter, Sapp and Stephens (1989) they have identified several attributes that have emerged in requiring higher education for law enforcement officers. Their significant findings from previous research included:

1. College-educated officers perform the tasks of policing better than noncollege counterparts.
2. College-educated officers perform the tasks of policing better than noncollege officers and are generally better communicators, whether with a citizen, in court, or part of a police report.

3. The college-educated officer is more flexible in dealing with difficult situations and dealing with persons of diverse culture, life-styles, races, and ethnicity.

4. Officers with higher education are more "professional" and more dedicated to policing as a career rather than as a job.

5. Educated officers adapt better to organizational change and are more responsive to alternative approaches to policing.

6. College-educated officers are more likely to see the broader picture of the criminal justice system than to view police more provincially as an exclusive group. (p. 9)

Carter, Sapp and Stephens also investigated recommendations regarding law enforcement hiring standards as reported by several national commissions. The following recommendations are included in their research.

1. Police agencies should establish some form of college requirement as a minimum standard for appointment and a higher requirement as a minimum standard for promotion.

2. Educational programs in police departments should be a matter of formal policy.

3. Higher education should be viewed as an occupational necessity that permeates a department's personnel plan.

4. Specifically directed higher education is needed to fulfill the responsibilities of all ranks within a law enforcement agency. (p 10)

With the call for professionalism in policing some law enforcement agencies have taken the initiative like Houston in requiring various amounts of higher education. Before Houston, the Arlington and Dallas Police Departments had college requirements for admittance into their agencies.

In fact, the Fifth Circuit Court of Appeals ruled in favor of the Dallas Police Department's forty-five hour college credit requirement in the landmark case of Davis v. Dallas (1985). The ruling was appealed to the United States Supreme Court and denied certiorari in 1986. When the Supreme Court let the Fifth Circuits decision stand as a final ruling it provided the foundation for many departments to require some level of higher education. The Fifth Circuit ruled that the, "...educational requirement bears a manifest relationship to the position of police officer" (Davis v. Dallas, 1985, p. 1).

When the Supreme Court let the Fifth Circuit Court ruling on Davis v. Dallas (1985) stand a few more law enforcement agencies in Texas implemented various forms of higher education requirements. In a 1995, United States, Justice Department report by B.A. Reaves and P.Z. Smith eleven Texas law enforcement agencies were reported to require some higher educational requirements.

In 1996, McKay conducted an investigation on higher education standards in police departments and reported them in an article. He identified fifteen law enforcement agencies in Texas having at least some higher educational requirements. McKay wrote the following passage in his article.

> Fifteen of the responding law enforcement agencies require that applicants have a certain level of college experience before being hired. (A few of the agencies waive this requirement for applications with previous law enforcement or military experience.) Arlington Police Department has the most selective standard, requiring its applicants to possess a bachelor's degree to be considered for employment. Eight of the 15 departments (53%) requiring college experience have designated an associate's degree (equivalent to 60 hours of college credit) or higher as the minimum level of college experience. (p. 11)

Fifteen police departments in Texas were identified as requiring either college credit or military service. The police departments were:

1. Arlington Police Department - (Bachelor's Degree)
2. Carrolton Police Department - (Associate's Degree)
3. Deer Park Police Department - (60 Hours of College)
4. Garland Police Department - (60 Hours of College)
5. Houston Police Department - (60 Hours /military waiver)
6. Midland Police Department - (60 Hours of College)
7. Texas Department of Public Safety - (60 Hours of College)

8. Travis County Sheriff's Department - (60 Hours of College)

9. Dallas Police Department - (45 Hours of College)

10. Abilene Police Department - (30 Hours of College)

11. Addison Police Department - (30 Hours of College)

12. Euless Police Department - (30 Hours of College)

13. Mesquite Police Department - (30 Hours of College)

14. North Richland Hills Police Department - (30 Hours of College)

15. Austin Police Department - (15 Hours of College). (p. 11)

The new direction of requiring sixty hours of college credit, however, was short lived as the exclusive means to enter the Houston Police Department. In late January 1991, the Gulf War had just ended and many veterans were coming home as conquering heroes.

Within weeks of the victory the Houston City Council wanted to welcome these men and women back home as well as provide them an opportunity to join the Houston Police Department. Some Council members sought to waive the requisite sixty college hours for military veterans. The measure also sought to increase minority representation and reward returning troops.

Chief Watson opposed the lifting of the requirement but lost after City Council voted in a 10-4 decision on February 6, 1991 to waive the educational requirements for veterans. Council members who voted in favor of the,

> Issue: Eliminating HPD college requirement for military veterans; Beverly Clark, John Goodner, Jim Greenwood, Christin Hartung, Shelia Jackson Lee, Frank Mancuso, Ernest McGowen, Larry McKaskle, Ben Reyes, and Vince Ryan. Council members voting against eliminating HPD college requirement for military veterans; Al Calloway, Dale Gorczynski, Margarette Robinson, and Eleanor Tinsley. (p. 8)

The Chief stated before City Council that "...national research has proven the benefits of a college education. Recruits with college credits will make better decisions in ambiguous situations, be more empathetic to minorities, and better understand democratic values" (Robinson, 1991, p. 1).

Support for Military Service

When the military waiver was enacted Houston police officials as well as others in the law enforcement community speculated how the veterans would perform in comparison with the cadets who had been admitted on their college merits. Proponents of the waiver cited military training as equal to the college education requirement.

Cynics of the sixty-hour higher education requirement were vocal during the Houston City Council debate and supported the military waiver. Williams (1992) conducted an assessment of a similar situation earlier in New York City regarding the need for higher education in police work. Criticisms Williams discovered in New York City included,

1. Academic training is irrelevant to what the police do;
2. Many good officers do not have college degrees while some poor officers do;
3. College graduates will never find police work-periods of monotony punctuated by moments of hostility, danger, and conflict attractive; and
4. Police attitudes are so deeply rooted in the requirements, ethic, and reward structure of policing that education alone cannot change them (p. 2).

The connection of higher education and military training are seen as similar in various aspects. Gottron (1991) reported on education in the workplace in a publication entitled: The Military Experience. She points out that "...private industry could benefit by adopting the military's attitude and emphasizing the value of education and training in the workplace." (p. 20). She also discusses the positive linkages between higher education and the military by building upon current competencies and skills.

Stephen Mangum of Ohio State University conducted a comparison survey on the transferability of military skills/training to civilian jobs. Mangum (1990) made the following assessments:

> 1. Fifty percent of all Army alumni had transferred their occupational skills to civilian jobs.
>
> 2. This compared favorably to a 48 percent rate of transfer by graduates of proprietary business schools and vocational/technical colleges.
>
> 3. Finally, the probability of skill transfer between military training and civilian employment is on par with that of most business schools and vocational/technical institutions. (p. 12)

In a cover story of the Association of the United States Army News (AUSAN) entitled U.S. Army Still Needs High Quality Soldiers the importance for transformation into civilian jobs was cited. The article states that, ". . .in a survey of Army alumni from 1984 to 1993, nearly 90 percent of those who assess themselves as very successful, credit their Army experience. Employers value the attributes gained by service in the Army-discipline, commitment, teamwork, plus specific skill training" (AUSAN, 1997, p. 1).

The military of the 1990's is well noted for technological advances as well as education and training. Hoyt (1993) writes that, "Education is an integral part of a military career. The Army is possibly the largest, most experienced training institution in the country. Military personnel benefit from a system that annually operates a 1.3 billion training program..." (p.1).

In an October 8, 1991, speech by Lieutenant General William H. Reno, Deputy Chief of Staff Personnel at the Department of the Army, he spoke on how the Army has focused on training and education. The following is an excerpt from his speech.

> The soldiers in today's Army are the finest we have ever had. Let me give you some examples of their quality.
>
> 1. Ninety-eight percent of our young men and women are high school diploma graduates;
>
> 2. Seventy-five percent are in the upper half of the test score category. Simply stated, 75 percent of the young men and women who present themselves for service are sufficiently intellectually gifted innately that they could attend any of the universities in their states;
>
> 3. Less than 1 percent of our soldiers are from the low test score category from which we draw our soldiers.
>
> For 1992, we have recruited on this 8th day of October, over 50 percent of the entire mission for this fiscal year. Our quality: 100 percent are high school graduates and over 82 percent are in the upper half intellectually of their cohorts. (p. 19)

Similarly, in an article by M. I. Bumgarner, he believed that the military was a good method of seeking qualified applicants into law enforcement. He, like Lieutenant General Reno remarked on the fact that the military service men/women of today were well educated and held many similarities to police officers. Bumgarner stated, military service personnel, "...have received training in many areas that are common to both the military and law enforcement professions, such as communications, first aid, and marksmanship. They are accustomed to working irregular hours, under stress, in unusual work environments. Most are capable of dealing with various segments of society, since they have been exposed to many lifestyles and environments" (Bumgarner, 1993, p. 19).

Lieutenant General T.G. Stroup (1996) writes that, ". . .America's soldiers are standard bearers for the rest of the world. Raised in the world's most successful democracy, they understand the importance of preserving freedom through service to the nation. We are a values-based institution with soldiers motivated by more than compulsory membership or financial compensation" (p. 144). These are the same virtues and moral ethics that American communities seek with its law enforcement agencies.

Building on the military commitment to values and training the Association of the United States Army News

(AUSAN) produced a 1997 Special Report. The report describes an action plan showcasing the Army's human relation expectations for its personnel that:

> 1. Maximizes the soldiers' awareness of how their individual actions affect others;
>
> 2. Emphasizes respect between and for soldiers of all races, creeds, gender, or national/ethnic heritage;
>
> 3. Enables soldiers to clearly understand the linkage between their actions toward others, and their unit's ability to accomplish the mission. (p. 11)

Reinforcement for the military service waiver also, came in 1995 when the United States, Department of Justice and Department of Defense launched the "Troops to COPS" program. The COPS acronym stands for Community Oriented Policing Services and was handled as a federal grant coordinated by the Department of Justice totaling fifteen million dollars in 1995.

The Troops to COPS program was developed to ". . . encourage the hiring of recently separated members of the armed forces as law enforcement officers. The goal of the grant-funded program was to provide an incentive for law enforcement agencies to hire veterans who have served the nation in the armed forces for service in community policing in cities and towns across America" (U.S. Department of

Justice, 1995, p. 1). Guidelines for the Troops to COPS grant included:

> 1. Troops to COPS funds may be used to reimburse law enforcement agencies for training costs for the qualified veteran who is hired as a law enforcement officer.
>
> 2. Awards will be made for up to $5,000 per veteran hired. These funds will be paid on a reimbursement basis after completion of training. There is no local matching requirement for a Troops to COPS grant. Troops to COPS funds may be used for costs incurred during the first three years of the veteran's service as a law enforcement officer.
>
> 3. Agencies may apply to Troops to COPS funds only after a veteran is hired. As with all COPS hiring grants, the veteran must satisfy the normal and customary hiring standards and procedures of the agency, and must receive training in community policing. (p. 1)

The Houston Police Department was an active participant in the 1995 Troops to COPS grant program. According to the Planning and Research Division of the Houston Police Department the grant provided $150,000 for the hire of 30 new police officers in 1995 (Redeaux, 1997). Although this was a one-time grant a precedent was established and could be reactivated in the future.

A common thread of honesty, compassion, teamwork, and moral virtue runs through the literature concerning individuals who have higher education and/or military service. Pollock (1994) discusses the need for sound morals, ethics, and virtues in law enforcement officers. She makes the following statement:

> Authority, force, discretion-these elements are inherent in the role of a law enforcement officer. No other criminal justice professional wields so much discretion over so many situations as part of everyday duties. No other criminal justice professional comes under so much public scrutiny. This scrutiny is understandable, however, when one realizes that police are power personified. They have the choice to arrest or not to arrest, to mediate or to charge, and in decisions to use deadly force, they even hold the power of life and death. (p. 91)

The role of police officer is changing in America from being strictly a law enforcer to a mediator and problem solver. Trojanowicz (1994) writes, "The police remain the only social service agency open 24 hours a day, seven days a week, that still makes house calls. As a result, the police are asked to solve problems that range from the loud party next door to the student who opens fire in school, never knowing what the next call may bring" (p. 121). When a person moves from cadet to officer they must believe in their oath, ". . .as a personal commitment to honor the rules of the policeman's office" (Heffernan, 1985, p. 3).

The recruitment and selection of police cadets becomes especially critical when one views the complex environment a police officer must function in. In his book, Delattre (1994) makes the following argument on police selection and recruiting. "Most important, all efforts to draw fine applicants to police work have to be combined with rigorous training and high performance standards" (p. 122).

Summary

A review of literature indicates that modern police officer must be open-minded and committed to fairness. Ferreira (1997) states, while a broad-based education is usually associated with higher education ". . .motivated people who can read well can educate themselves to a high level" (p. 26).

Mahony and Prenzler (1996) make this insightful statement in an article regarding the move toward requiring higher education in the field of law enforcement. They write,

> The new presence of higher education in police education reflects the community's recognition of the difficult nature of much contemporary police work. It would be illusory, however, to image that higher education, even at its most successful, could offer a panacea for police problems. Some of these problems are created by the community through an expectation of the enforcement of laws that some may view as an affront to civil liberties. (p. 301)

Ultimately, many positive attributes were found in the review of literature of both individuals who have higher education and/or military service. However, the actual achievement level based on test and skill scores between the various groups was still yet undetermined. In conclusion, it has been more than seven years since the military service waiver was passed and the investigator seeks to find if there is a statistically significant difference between these two avenues of admittance into the police academy.

Chapter 3

DESIGN OF THE STUDY

The investigator sought to determine if there was a statistically significant difference in the achievement level at the Houston Police Academy between cadets who have sixty hours or more college credit and cadets who are admitted via the military service waiver. Specifically, the investigation compared the level of achievement by cadets who had (1) no military service but with sixty hours or more college credit, (2) military service and 0 hours of college credit and, (3) military service and 1-59 hours of college credit.

The three differing groups were measured on their reading comprehension scores, state licensing scores, civil service scores, academic average scores, driving skills average scores, and firearms average scores. The investigation required a research design that would yield reliable, valid and quantitative statistical information.

Research Design

The research design employed by the investigator was a one-way analysis of variance (ANOVA) focusing on the three differing levels as they relate to education. This design allowed the investigator, ". . .to test a number of hypothesis and yield a great deal of information" (Kerlinger, 1986). The level of significance was set at the .05 level. The research was ex-post-facto in nature because the investigator does not have direct control over the independent variables since they had already occurred. This particular design laid a structure that clearly stated the configuration of the research process, controlled for error and reduced variance.

The researcher used a randomized sample procedure (Kerlinger, 1986). The sample was based on a stratified sampling process, using one cadet class per year (Borg and Gall, 1989).

A one-way ANOVA statistical test was used to analyze the data (Ferguson and Takane, 1989). The statistical test employs an analysis of variance to determine the impact an independent variable had on a dependent variable as well as the impact between the three differing groups of variables in the investigation.

Sampling Procedures

All cadet classes that graduated from the Houston Police Academy between 1992 and 1996 made up the population that was eligible to participate in the study. A randomized stratified sample was used in the investigation to select the sample from the population.

One class from each year: 1992, 1993, 1994, 1995, and 1996 was randomly selected resulting in five total classes for the study. The number of classes which graduated between 1992-1996 was twenty-three, resulting in a sample-population ratio of twenty-two percent. Therefore, the entire population of cadets between 1992 and 1996 had an N count of 1,540, the N count of cadets used in the sample population ratio was 355 before delimitations and 273 afterward.

Independent Variables

The independent variables consisted of the cadets' level of higher education or their prior military service. These variables were then broken into three groups consisting of: No Military Service & 60 College Hours, Military Service & 0 College Hours, and Military Service & 1-59 College Hours.

Dependent Variables

The dependent variables measured the level of achievement based on scores. These variables were broken into six areas consisting of: Reading comprehension scores, State licensing scores, Civil Service scores, Academic average scores, Driving skill average scores, and Firearms skill average scores.

Instrumentation

Reading Comprehension Test

The reading comprehension test (RCT) was developed in response to the Houston Police Department seeking a reliable base level for officers to be able to perform their job functions. The examination consists of paragraphs based on materials that cadets are required to read and/or study in the police academy. The individual must read the passage and then make logical choices about what the paragraph means. A minimum score of fifteen is required to be admitted into the police academy.

The reading comprehension examination is designed to measure the person's ability to read and understand written English. The examination is not designed to test their root knowledge of law enforcement. It is very similar to the

English Proficiency Examination given by colleges and universities. Campa (1993) makes the following statement,

> The test was developed based upon the content of both the Academy and job materials. Part of the data obtained from an extensive job analysis on the position of police officer was used to gather the job-related material. The result was four parallel forms [versions] of the reading comprehension test. The developer found the four forms to have reliability and validity. (p. 60)

The scores on the reading comprehension examination were broken down into four levels of achievement. These scores were converted into the 100 point system to match the other scores within the investigation. The conversion divided the raw score by 30, then multiplied them by 100, which yielded a useable score. The scale used was based on consultations with R. Phelps, Cadet Counselor and Academic Advisor (Phelps, 1997).

Excellent, scores (28-30) = converted scores (93-100)

Very Good, scores (24-27) = converted scores (80-92)

Satisfactory, scores (21-23)= converted scores (70-79)

Minimum, scores (15-20) = converted scores (50-69)

State Licensing Examination

Each cadet was required to pass the Texas Commission on Law Enforcement Officer Standards and Education (TCLEOSE) examination prior to graduation from the Houston Police Academy. All phases of the Texas Commission on Law Enforcement Officer Standards and Education must be successfully completed before this examination can be administered. The content of the TCLEOSE (1997) curriculum centers on thirty-three objectives that include:

> Fitness and Wellness, History of Policing, Professionalism and Ethics, U.S. & Texas Constitutions and Bill of Rights, Criminal Justice System, Code of Criminal Procedure, Arrest, Search & Seizure, Penal Code, Traffic Code, Civil Process and Liability, Texas Alcoholic Beverage Code, Drug Identification, Juvenile Issues, Stress Management for Peace Officers, Field Note-taking, Interpersonal Communications, Report Writing, Use of Force Concepts, Strategies of Defense-Mechanics of Arrest, Strategies of Defense-Firearms, Emergency Medical Assistance, Emergency Communications, Problem Solving and Critical Thinking, Professional Police Driving, Multicultural and Human Relations, Professional Policing Approaches, Patrol, Victims of Crime, Family Violence and Assault Offenses, Recognizing and Interacting with Persons with Mental Illness and Mental Retardation, Crowd Control Management, Hazardous Materials Awareness, as well as Criminal Investigation. (p. 3)

A cadet who scores less than seventy percent (70%) on this examination will be permitted two re-tests in order to achieve the required minimum score. A cadet who fails to achieve the required score is recommended for termination (Houston Police Academy, 1994).

The performance level on the state licensing examination which is administered by the Texas Commission on Law Enforcement Officers Standards and Education are broken into four levels of achievement. For the purpose of this investigation, only the initial test score was used in the evaluation. Kenneth Sander, Director of Testing, the Texas Commission on Law Enforcement Officers Standards and Education designed the four-scale levels (Sander, 1997). The four achievement levels are:

Excellent scores = (87-100)

Very Good scores = (77-86)

Minimal Pass/Satisfactory scores = (70-76)

Failure/Unsatisfactory scores = (0-69)

Civil Service Examination

Each cadet was required to pass the City of Houston Civil Service examination prior to graduation from the Houston Police Academy. All phases of cadet training must be successfully completed before this examination could be administered.

The test is a knowledge-based comprehensive examination given at the end of the academy covering all subjects taught. The questions are extracted from the entire Houston Police Academy test bank. There are no re-tests provided for this examination, thus a cadet who scores less than seventy percent (70%) on the examination is recommended for termination. Additionally, military veterans were given five bonus points on their score, but must obtain at least 70% on their initial score, (for this study the five bonus points were removed) in accordance with section 143.25 (f) of the Local Government Code (Houston Police Academy, 1994).

Academic Average Scores

Academic standards in the Houston Police Department are governed by state statute but are controlled by department policy. The following standards represent the department policy required to successfully complete the training requirements of the Houston Police Academy. The Academy recognizes seventy percent (70%) as the minimum score to pass examinations in all areas of training: academic, technical skills and tactical defense. The examinations and quizzes are taken from the following subjects (Webb, 1994):

> Community service, communications, evidence, patrol procedures, penal codes, psychology of policing/stress management, fingerprint identification, ethics, conflict resolution, homicide investigation, sex crime investigation, special thefts, narcotics investigation, offense report writing, nutrition, forgery investigation,

> interview and interrogation, robbery investigation, human relations, juvenile investigation, burglary and theft investigation, crime scene protection and search, bomb threat investigation, family violence, defensive driving, officer safety/use of force, traffic laws, emergency mobilization and crowd management, radio procedures, jail operations, communications for the hearing impaired, computer aided dispatch, crime analysis, hazardous material recognition and response, emergency vehicle response and liability, key map, laptop computer training, toxicology, mental health warrants, courtroom demeanor, recognizing and handling abnormal people, UNISYS mainframe computer training, mobile data terminal training, code of criminal procedure, family law, DWI investigations, arrest, search and seizure, laws of evidence, civil laws, first responder, departmental general orders/forms, and traffic collision investigation. (p. 35)

The academic testing portion of the academy consists of primary examinations and quizzes. Primary examinations are the most important examinations in the training program because they cover the essential elements of the curriculum and are used to determine a cadet's continued employment. Cadets receive eight primary examinations throughout their time at the academy. Quizzes were designed to measure a cadet's progress on a limited amount of material. Quizzes were not used to determine ongoing employment eligibility, although the accumulative score of all quizzes were added into a cadet's academic average. There was a potential of seven quizzes being administered, but this may have varied due to changes in the training schedule.

All primary examinations and quizzes are reviewed to ensure that the cadet understands the material that has been presented. These reviews were held at the discretion of the training staff and attendance was mandatory.

A cadet who scored less than seventy-five percent (75%) on any examination or quiz is required to meet with the class counselor for possible remediation. Any cadet who showed significant changes in test results may have been required to meet with the class counselor. The class counselor makes all determinations concerning continued counseling and remediation.

A cadet who scored less than seventy percent (70%) on any primary exam was permitted one re-test in order to achieve the required minimum score. A cadet who scored less than seventy percent (70%) on any three is recommended for termination (Houston Police Academy, 1994).

Drivers Training

All cadets must successfully complete the drivers training portion as part of the training program provided by the academy. The driving portion consists of fifty hours of hands-on and fourteen hours of classroom instruction. The hands-on portion utilizes two different drivers' tracks: a figure eight fast track designed for performance driving and a precision pad where vehicle-handling techniques are practiced at variant speeds.

The classroom portion includes an eight-hour Defensive Driving Course (DDC) and six hours of lecture on driving the figure eight fast track and precision pad courses. Successful completion requires a final grade of seventy percent (70%). This grade is derived from the cadet completing three tests on the driving course which are averaged together to determine the final grade. A cadet who fails to achieve a cumulative average score of seventy percent (70%) is required to complete a remediation phase and a re-testing phase. A maximum of twelve hours of remediation instruction is given. The cadet must score a minimum of seventy (70%) or more on the re-test. Failure to achieve a minimum passing score results in a recommendation for termination (Houston Police Academy, 1994).

Firearms Training

All cadets must satisfactorily complete the Tactical Firearms Training Program before they graduate from the

Houston Police Academy. The program consists of the successful completion of the Handgun Qualification Course, Shotgun Qualification Course, Stress Course, Night Firing Course and the written examination.

Only handguns meeting cadet regulations may be used during Tactical Firearms Training. To qualify with a handgun, a cadet must score seventy-five percent (75%) on the qualification test. A cadet who fails to score seventy-five percent (75%) must retake the qualification test. Remediation consists of up to twenty-five (25) hours of additional instruction. During this additional time, cadets have an opportunity to re-test. Cadets must pass two remedial tests, consecutively, with the minimum score of seventy-five (75%) on each test.

To qualify with a shotgun a cadet must score seventy percent (70%) or more on the combat shotgun course on the designated day and time. A cadet who fails to score seventy percent (70%) is re-tested a maximum of two times. Remedial instruction is given prior to each re-test. When the cadet scores a seventy percent (70%) or more on two consecutive tests, he/she is considered to have qualified with a shotgun.

The Stress Fire Course is designed to teach the use of cover and concealment and to illustrate the effect of stress in a shooting situation. The Night Fire Course is designed to show the application of using the flashlight to illuminate a subject while utilizing the weapon.

The written portion of the Tactical Firearms Training Program is handled as a primary examination. A cadet must also have a minimum score of seventy percent (70%) for the Tactical Firearms Training program. The program grade consists of scores from the Handgun Qualification Course (60% of total score), Shotgun Qualification Course (30% of total score). A cadet failing to score seventy percent (70%) or more on the Tactical Firearms Training Program grade is recommended for termination. All cadets must satisfactorily complete all phases of the Tactical Firearms Training Program required by the Texas Commission on Law Enforcement and the Houston Police Department before they can graduate (Houston Police Academy, 1994).

The civil service examination scores, academic average scores, driving skills average scores, and firearms average scores are broken into four levels of achievement. The scores are accompanied by the requirements set out in the Cadet Code of Conduct. These requirements give a detailed description of the methodology used in obtaining the scores for the research. The scale adopted by the Houston Police Academy is patterned after the four scale levels used in most educational institutions:

Excellent scores = (90-100)

Very Good scores = (80-89)

Minimal Pass/Satisfactory scores = (70-79)

Failure/Unsatisfactory scores = (0-69)

Data Collection Procedure

One cadet class per year was randomly selected during the year's 1992-1996 out of five separate envelopes for the study. This action yielded a random sample of five cadet classes for the investigation. Additionally, it should be noted that each cadet class has approximately seventy cadets. In order to determine the number of subjects to be used in the investigation, the following formula was used.

The initial N count was N=355, before delimitation's and 273 afterward. There were some subjects removed, (delimited) from the investigation once the categorization took place. The delimitations excluded the following individuals from the sample:

1. All individuals who have military service and more than sixty college hours (they could have entered

under either policy).

2. All previously certified peace officers (they did not take all examinations).
3. All non-graduates from the police academy (they may not have taken all tests). However, the number of cadets who did not graduate from either method was nine. Five of the cadets had the college requisite and four were military veterans.

Analysis of Data

The statistical test used in evaluating this research was a one-way analysis of variance (ANOVA) test (Ferguson and Takane, 1989). This type of design enabled the investigator to focus on the three differing educational levels. The investigator computed the data on a SPSS statistical program. The statistical information contained in the investigation was ratio data. The level of significance was set at the .05 level. By utilizing the ANOVA testing process the investigator was able to determine the strength of the variables used in the research, as well as determine how much they were independent of each other individually and between groups.

Summary

The problem statement of this investigation is: To determination whether or not there was a statistically significant difference between the achievement level at the Houston Police Academy between cadets who have sixty hours or more college credit and cadets who are admitted via the military service waiver. The problem was evaluated by grouping police cadets into three differing levels of education and/or military service. The investigator measured these three differing groups achievement levels using six academic and skills based tests.

Specifically, the investigation compared the level of achievement by cadets, (independent variables) who had (1) no military service but with sixty hours or more college credit, (2) military service and 0 hours of college credit, and (3) military service and 1-59 hours of college credit. These three differing groups were evaluated in contrast with the six (dependent variables) consisting of reading comprehension scores, state licensing scores, civil service scores, academic average scores driving skills average scores, and firearms average scores.

The data was statistically evaluated using a one-way analysis of variance (ANOVA) test. By utilizing the ANOVA testing process the investigator was able to analyze the strength of the variables used in the research. The significance level for the investigation is set at the .05 level. This level allowed the investigator to examine how much the independent variables affect these dependent variables individually and between the defined groups in a social science arena.

Chapter 4

ANALYSIS OF DATA

Purpose of the Study

The purpose of this investigation was to discover if there is a statistically significant difference in the performance level between three independent groups. These groups consist of cadets who have (1) no military service but with sixty hours or more college credit, (2) military service and 0 hours of college credit and, (3) military service and 1-59 hours of college credit.

There are six differing dependent variables analyzed in this investigation. The dependent variables are the cadets reading comprehension scores, state licensing scores, civil service scores, academic average scores, driving skill average scores, and firearms skill average scores.

Research Questions

The following research questions are in this study.

1. Does the number of college credit hours and/or

military service affect the reading comprehension scores by cadets in the Houston Police Academy?

2. Does the number of college credit hours and/or military service affect state licensing scores by cadets in the Houston Police Academy?
3. Does the number of college credit hours and/or military service affect Civil Service scores by cadets in the Houston Police Academy?
4. Does the number of college credit hours and/or military service affect the academic average scores by cadets in the Houston Police Academy?
5. Does the number of college credit hours and/or military service affect the driving skills average scores by cadets in the Houston Police Academy?
6. Does the number of college credit hours and/or military service affect the firearms skills average scores by cadets in the Houston Police Academy?

Hypotheses

The following hypotheses were tested in this study.

Ho_1: There is no statistically significant difference in the scores of cadets with no military service and at least 60 hours of college credit and cadets who have military service with either 0 hours or 1-59 hours of college credit in regard to their reading comprehension scores.

Ho_2: There is no statistically significant difference in the scores of cadets with no military service and at least 60 hours of college credit and cadets who have military service with either 0 hour or 1-59 hours of college credit in regard to their state licensing scores.

Ho_3: There is no statistically significant difference in the scores of cadets with no military service and at least 60 hours of college credit and cadets who have military service with either 0 hours or 1-59 of college credit in regard to their civil service scores.

Ho_4: There is no statistically significant difference in the scores of cadets with no military service and at least 60 hours of college credit and cadets who have military service with either 0 hours or 1-59 hours of college credit in regard to their academic average scores.

Ho_5: There is no statistically significant difference in the scores of cadets with no military service and at least 60 hours of college credit and cadets who have military service with either 0 hours or 1-59 hours of college credit in regard to their driving skill average scores.

Ho_6: There is no statistically significant difference in the scores of cadets with no military service and at least 60 hours of college credit and cadets who have military service with either 0 hours or 1-59 hours of college credit in regard to their firearms skill average scores.

Sample

The original sample for the investigation had 355 cadets before delimitations and a useable N = 273 afterward. The original sample of 355 had 82 individuals who were delimited because they were: (a) military and more than 60 college hours and could have entered under either policy, (b) previously certified officers and did not take all tests, or (c) terminated from the academy and may not have taken all tests. This left an applicable sample of 273 consisting of 159 cadets who had sixty hours or more college credit and no military service. The mean number of college hours for this group was 112 semester credits. There are 50 cadets who had prior military service and between 1 and 59 hours of college credit. The mean number of hours for this group was 26 semester credits. Finally, the investigation had 64 cadets who had military service and 0 college hours.

Demographics

All of the members within this sample were admitted to the Houston Police Academy based on their military service and/or having at least sixty hours of college credit. The original sample of 355 individuals was comprised of a mixed group of males and females from a diverse range of race and ethnicity. The sex and race/ethnicity breakdown of cadets in the original sample of 355 included: 290 males (82%) and 65 females (18%); of those cadets 163 (46%) are White, 86 (24%) Black, 84 (23.5%) Hispanic, 20 (6%) Asians, and 2 (.5%) Pacific Islanders. The age range for the sample is between twenty-one to thirty-five years old as dictated by police department policy. Also according to policy all participants are in good health with their weight in proportion to their height (HPD/Recruiting, 1994).

Finally, it should be pointed out that the original sample of 355 was reduced to the actual sample of 273 because some of the cadets fell into the following categories: (a) military and more than 60 college hours, and could have entered under either policy, (b) previously certified officers and did not take all tests, or (c) terminated from the academy and may not have taken all tests. The exact demographics of the 273 pulled from the 355 is protected confidential information by the Houston Police Department and unavailable to the investigator.

Analysis of Data

The statistical test used in evaluating this research was a one-way analysis of variance (ANOVA) test (Ferguson and Takane, 1989). This type of design enabled the investigator to focus on the three differing educational levels, simultaneously. The investigator computed the data on an SPSS 6.1 statistical program.

The statistical information contained in the investigation was ratio data. The level of significance was set at the .05 level, which is usually recognized by social science as an acceptable level. By utilizing the ANOVA testing process, the investigator was able to determine (1) the strength between independent and dependent variables and (2) the strength among three independent variables.

Examination of Hypotheses:

Ho_1: A one-way ANOVA was performed investigating the statistical difference between cadets who had (1) no military service but with sixty hours or more college credit, (2) military service and 0 hours of college credit, and (3) military service and 1-59 hours of college credit in regard to their reading comprehension test scores.

The scores for the reading comprehension test were converted into a 100 point system to match the other scores within the investigation. The conversion divided the actual raw score by 30, then multiplied them by 100, which yielded a useable score. An example of the conversion process is as follows: J. Doe scores a “24” on the reading comprehension test. The investigator divided the 24 by 30, yielding a score of .08 x 100 = 80. The scores from all 273 participants in the investigation were converted using this mathematical method. The minimum score on the examination was 50 while the maximum score was 100.

The following findings were based on the cadets military/college experience and their converted scores on the reading comprehension test using a one-way ANOVA at the .05 significance level. The independent variable was the cadets military/college status and the dependent variable was the cadets reading comprehension test score.

As shown in Table 1, there was a statistically significant difference between the several groups on reading comprehension (F=12.20, df=2/270, p<.05). The investigator utilizied a post-hoc Scheffe significance test for statistical significance to determine where the greatest difference occurred.

Table 1

One-Way Analysis of Variance
Summary for Reading Comprehension Examination

Source	D.F.	Sum of Squares	Mean Squares	F-Ratio
Between Groups	2	3654.9354	1827.4677	12.2049
Within Groups	270	40427.7752	149.7325	
Total	272	44082,7106		

Note: The difference between two means is significant if Mean (J) - Mean (I) = 8.6525 {Range} SQRT (1/N(I) + 1/N(J)) with the following value(s) for range: 3.48. Mean scores are listed from low to high according to the evaluated groups. Group 1-No military service and 60+ college hours, Group 2-Military service and 0 college hours, and Group 3-Military service and less than 59 college hours.

Table 2

Post-hoc Scheffe Test
Reading Comprehension Mean Scores by Groups

Groups:	Mean Scores
Group 2	67.5469
Group 3*	73.5800
Group 1*	76.4906

Note: * Indicates statistically significant differences between the lowest scores and the other group(s). The findings from Table 2 revealed that the mean scores Group 1-No military service and 60+ college hours was 76.49. This put Group 1 in the mid-range of the scale. Group 2-Military service and 0 college hours were in the lowest range of the scale with a mean score of 67.54. And Group 3-Military service and less than 59 college hours fell in the lower end of the mid-range scale between Groups 1 & 2 at 73.58.

Table 3

Achievement Levels by Groups Based on Reading Comprehension Scores

	Group 1	Group 2	Group 3
Excellent	13	1	3
Very Good	67	14	16
Satisfactory	40	12	16
Minimum	39	37	15
Group n	159	64	50

Note: Group 1-No military service and 60+ college hours, Group 2-Military service and no college hours and, Group 3-Military service and less than 59 college hours. The three cadet groups were placed into four differing levels of achievement. The listed levels of achievement regarding the cadets reading comprehension score ranges are as follows: Excellent 93-100, Very Good 80-92, Satisfactory 70-79, and Minimum 50-69 (Phelps, 1997).

Table 4

Percentage of Achievement Levels by Groups Based on Reading Comprehension Scores

	Group 1	Group 2	Group 3
Excellent	8.17	1.56	6.00
Very Good	42.14	21.88	32.00
Satisfactory	25.16	18.75	32.00
Minimum	24.53	57.81	30.00
Pct. by Group	100%	100%	100%

Note: Group 1-No military service and 60+ college hours, Group 2-Military service and no college hours and, Group 3-Military service and less than 59 college hours. The three cadet groups were placed into four differing levels of achievement. The listed levels of achievement regarding the cadets reading comprehension score ranges are as follows: Excellent 93-100, Very Good 80-92, Satisfactory 70-79, and Minimum 50-69 (Phelps, 1997).

Therefore, based on the statistical tests performed the investigator rejected the null hypothesis and found that there was a statistically significant difference between Group 1 & Group 2 and Group 2 & Group 3. However, the investigator accepted the null hypothesis that there was not a statistically significant difference between Group 1 & Group 3 on reading comprehension.

Ho_2: A one-way ANOVA was performed investigating the statistical difference between cadets who have (1) no military service but with sixty hours or more college credit, (2) military service and 0 hours of college credit, and (3) military service and 1-59 hours of college credit in regard to their state licensing test scores.

The following findings were based on the cadets military/college experience and their scores on the state licensing test using a one-way ANOVA at the .05 significance level. The independent variable was the cadets military or college status and the dependent variable is the cadets state licensing score. The lowest test score was 53 while the highest test score was 90.

As shown in Table 5, there was a statistically significant difference between the several groups on state licensing (F=3.49, df= 2/270, p<.05). The investigator utilized a post-hoc Scheffe significance test for statistical significance to determine where the greatest difference occurred.

Table 5

One-Way Analysis of Variance
Summary for State Licensing Examination

Source	D.F.	Sum of Squares	Mean Squares	F-Ratio
Between Groups	2	314.4930	157.2465	3.4927
Within Groups	270	12155.6462	45.0209	
Total	272	12470.1392		

Note: The difference between two means is significant if Mean (J) - Mean (I) = 4.7445 {Range} SQRT (1/N(I) + 1/N(J)) with the following value(s) for range: 3.48. Mean scores are listed from low to high according to the evaluated groups. Group 1-No Military service and 60+ College hours, Group 2-Military service and 0 college hours, and Group 3-Military service and less than 59 college hours.

8

Table 6

Post-hoc Scheffe Test
State Licensing Mean Scores by Groups

Groups:	Mean Scores
Group 2	72.9375
Group 3	75.1000
Group 1*	75.5472

Note: * Indicates statistically significant differences between group(s). The findings from Table 6 revealed that the mean score of cadets with no military service and 60 or more college hours was 75.5472. This placed Group 1 in the upper end of the Satisfactory scale. Cadets in Group 2 with military service and 0 college hours had the lowest mean score of 72.9375. Group 2 was in the lower part of the Satisfactory scale. Cadets in Group 3 with military service and less than 59 college hours, fell in between Group 1 & 2 in the Satisfactory scale with a mean score of 75.1000.

Table 7

Achievement Levels by Groups Based on State Licensing Scores

	Group 1	Group 2	Group 3
Excellent	4	5	1
Very Good	76	17	21
Satisfactory	55	22	19
Failure	24	20	9
Group n	159	64	50

Note: Group 1-No military service and 60+ college hours, Group 2-Military service and no college hours and, Group 3-Military service and less than 59 college hours. The three cadet groups were placed into four differing levels of achievement. The listed levels of achievement regarding the cadets state licensing examination scores are as follows: Excellent 87-100, Very Good 77-86, Satisfactory 70-76, and Failure 0-69 (Sander, 1997).

Table 8

Percentage of Achievement Levels by Groups Based on State Licensing Scores

	Group 1	Group 2	Group 3
Excellent	2.52	7.81	2.00
Very Good	47.80	26.56	42.00
Satisfactory	34.59	34.38	38.00
Failure	15.09	31.25	18.00
Pct. by Group	100%	100%	100%

Note: Group 1-No military service and 60+ college hours, Group 2-Military service and no college hours and, Group 3-Military service and less than 59 college hours. The three cadet groups were placed into four differing levels of achievement. The listed levels of achievement regarding the cadets state licensing scores are as follows: Excellent 87-100, Very Good 77-86, Satisfactory 70-76, and Failure 0-69 (Sander, 1997).

Therefore, based on the statistical tests performed the investigator rejected the null hypothesis and found that there was a statistically significant difference between Group 1 & Group 2. However, the investigator accepted the null hypothesis that there was not a statically significant difference between Group 2 & Group 3 or Group 1 & Group 3 on state licensing score.

Ho_3: A one-way ANOVA was performed investigating the statistical difference between cadets who have (1) no military service but with sixty hours or more college credit, (2) military service and 0 hours of college credit, and (3) military service and 1-59 hours of college credit in regard to their civil service test scores. The scores for the civil service test were converted into a 100 point system to match the other scores within the investigation.

The conversion subtracted five bonus points given to cadets with military service, which yielded a useable score. An example of the conversion process follows: Jane Doe, a military veteran scored an 80 on the civil service test, her grade became an 85 with the bonus points. The investigator took the posted score of (85 - 5 = 80). The 80 was then placed in the study with the other sample participants. The scores from all 114 military veterans in the investigation were converted using this mathematical method. The lowest test score was 72 while the highest test score of any cadet was 98.

The following findings are based on the cadets military/college experience and their scores on the civil service test using a one-way ANOVA at the .05 level of significance. The independent variable was the cadets military/college status which are subdivided into three separate groups and the dependent variable was the civil service score.

As shown in Table 9, there was a statistically significant difference between the several groups on the civil service test ($F = 6.87$, $df = 2/270$, $p < .05$). The investigator utilized a post-hoc Scheffe significance test for statistical significance to determine where the greatest difference occurred.

Table 9

One-Way Analysis of Variance
Summary for Civil Service Examination

Source	D.F.	Sum of Squares	Mean Squares	F-Ratio
Between Groups	2	325.2591	162.6295	6.8677
Within Groups	270	6393.6494	23.6802	
Total	272	6718.9084		

Note: The difference between two means is significant if Mean (J) - Mean (I) = 3.4409 {Range} SQRT (1/N(I) + 1/N(J)) with the following value(s) for range: 3.48. Mean scores are listed from low to high according to the evaluated groups. Group 1-No Military service and 60+ College hours, Group 2-Military service and 0 college hours, and Group 3-Military service and less than 59 College hours.

Table 10

Post-hoc Scheffe Test
Civil Service Mean Scores by Groups

Groups	Mean Scores
Group 2	85.3125
Group 3	87.0000
Group 1*	87.9748

Note: * Indicates significant differences between the lowest scores and the other group(s). The findings from Table 10 revealed that the mean scores of Group 1, cadets with no military service and 60 or more college hours was 87.9748. This placed Group 1 in the upper portion of the Very Good scale. Group 2, cadets with military service and 0 college hours had the lowest mean score of 85.3125. This placed Group 2 in the mid-range of the Very Good scale. And Group 3, cadets with military service and less than 59 college hours fell in between Group 1 & 2 with a mean score of 87.000. This placed Group 3 in between the means of Group 1 and Group 3 in the Very Good scale slightly below Group 1.

Table 11

Achievement Levels by Groups Based on Civil Service Scores

	Group 1	Group 2	Group 3
Excellent	70	13	19
Very Good	83	45	25
Satisfactory	6	6	6
Failure	0	0	0
Group n	159	64	50

Note: Group 1-No military service and 60+ college hours, Group 2-Military service and no college hours and, Group 3-Military service and less than 59 college hours. The three cadet groups were placed into four differing levels of achievement. The listed achievement levels regarding the civil service score ranges are as follows: Excellent 90-100, Very Good 80-89, Satisfactory 70-79, and Failure 0-69. Failing the civil service examination results in an automatic cadet termination, there are no re-tests (Houston Police Academy, 1994).

Table 12

Percentage of Achievement Levels by Groups Based on Civil Service Scores

	Group 1	Group 2	Group 3
Excellent	44.03	20.31	38.00
Very Good	52.20	70.31	50.00
Satisfactory	3.77	9.38	12.00
Failure	0	0	0
Pct. by Group	100%	100%	100%

Note: Group 1-No military service and 60+ college hours, Group 2-Military service and no college hours and, Group 3-Military service and less than 59 college hours. The listed achievement levels regarding the civil service score ranges are as follows: Excellent 90-100, Very Good 80-89, Satisfactory 70-79, and Failure 0-69. Failing the civil service examination results in an automatic termination of a cadet, there are no re-tests (Houston Police Academy, 1994).

Therefore, based on the statistical tests performed the investigator rejected the null hypothesis and found that there was a statistically significant difference between Group 1 & Group 2. However, the investigator must accept the null hypothesis that there was not a statistically significant difference between Group 2 & Group 3 or Group 1 & Group 3 on civil service scores.

Ho_4: A one-way ANOVA was performed investigating the statistical difference between cadets who have (1) no military service but with sixty hours or more college credit, (2) military service and 0 hours of college credit, and (3) military service and 1-59 hours of college credit in regard to their academic average scores.

The following findings are based on the cadets military/college experience and their academic average scores using a one-way ANOVA at the .05 significance level. The independent variable was the cadets military/college status and the dependent variable was the academic average scores. The lowest average score was 74 while the highest average score was 98.

As shown in Table 13, there was a statistically significant difference between the several groups on academic averages (F=5.99, df= 2/270, p<.05). The investigator utilized a post-hoc Scheffe significance test for statistical significance to determine where the greatest difference occurred.

Table 13

One-Way Analysis of Variance
Summary for Academic Averages

Source	D.F.	Sum of Squares	Mean Squares	F-Ratio
Between Groups	2	275.9854	137.9927	5.9938
Within Groups	270	6216.0659	23.0225	
Total	272	6492.0513		

Note: The difference between two means is significant if Mean (J) - Mean (I) = 3.3928 {Range} SQRT (1/N(I) + 1/N(J)) with the following value(s) for range: 3.48. Mean scores from low to high list the evaluated groups. Group 1-No military service and 60+ college hours, Group 2-Military service and 0 college hours, and Group 3-Military service and less than 59 college hours.

Table 14

Post-hoc Sheffe Test
Academic Average Mean Scores by Groups

Groups:	Mean Scores
Group 2	84.7188
Group 3	86.1800
Group 1*	87.1635

Note: * Indicates statistically significant differences between the lowest scores and the other group(s). The findings from Table 14 revealed that the mean scores of Group 1, cadets with no military service and 60 or more college hours was 87.1635. This placed Group 1 in the upper portion of the Very Good scale. Group 2, cadets with military service and 0 college hours has the lowest mean score of 84.7188. Group 2 was in the mid-range of the Very Good scale. Group 3, cadets with military service and less than 59 college hours were in between Group 1 & 2 with a mean score of 86.1800, slightly less than Group 1.

Table 15

Achievement Levels by Groups Based on Academic Average Scores

	Group 1	Group 2	Group 3
Excellent	55	12	15
Very Good	93	42	29
Satisfactory	11	10	6
Failure	0	0	0
Group n	159	64	50

Note: Group 1-No military service and 60+ college hours, Group 2-Military service and no college hours and, Group 3-Military service and less than 59 college hours. The listed achievement levels for academic average score ranges are as follows: Excellent 90-100, Very Good 80-89, Satisfactory 70-79, and Failure 0-69. A cadet must have an overall academic average of 70 percent or greater to graduate from the police academy (Houston Police Academy, 1994).

Table 16

Percentage of Achievement Levels by Groups Based on Academic Average Scores

	Group 1	Group 2	Group 3
Excellent	34.59	18.75	30.00
Very Good	58.49	65.63	58.00
Satisfactory	6.92	15.62	12.00
Failure	0	0	0
Pct. by Group	100%	100%	100%

Note: Group 1-No military service and 60+ college hours, Group 2-Military service and no college hours and, Group 3-Military service and less than 59 college hours. The listed achievement levels for academic average score ranges are as follows: Excellent 90-100, Very Good 80-89, Satisfactory 70-79, and Failure 0-69. A cadet must have an overall academic average of 70 percent or greater to graduate from the police academy (Houston Police Academy, 1994).

Therefore, based on the statistical tests performed the investigator rejected the null hypothesis and state that there was a statistically significant difference between Group 1 & Group 2. However, the investigator accepted the null hypothesis that there was not a statistically significant difference between Group 2 & Group 3 or Group 1 & Group 3 on academic average scores.

Ho_5: A one-way ANOVA was performed investigating the statistical difference between cadets who have (1) no military service but with sixty hours or more college credit, (2) military service and 0 hours of college credit, and (3) military service and 1-59 hours of college credit in regard to their driving skill average scores.

The following findings are based on the cadets military/college experience and their driving skill average scores using a one-way ANOVA at the .05 significance level. The independent variable was the cadets military/college status and the dependent variable was the driving skill average scores. The lowest average score was 54 while the highest average score was 97.

As shown in Table 17, there was not a statistically significant difference between the several groups on driving skill performance (F=1.04, df= 2/270, p>.05). The investigator utilized a post-hoc Scheffe significance test for statistical significance to determine where the greatest difference occurred.

Table 17

One-Way Analysis of Variance
Summary for Driving Skills

Source	D.F.	Sum of Squares	Mean Squares	F-Ratio
Between Groups	2	113.3103	56.6552	1.0422
Within Groups	270	14678.0743	54.3632	
Total	272	14791.3846		

Note: The difference between two means is significant if Mean (J) - Mean (I) = 5.2136 {Range} SQRT (1/N(I) + 1/N(J)) with the following value(s) for range: 3.48. Mean scores are listed from low to high according to the evaluated groups. Group 1-No military service and 60+ college hours, Group 2-Military service and 0 college hours, and Group 3-Military service and less than 59 college hours.

Table 18

Post-hoc Scheffe Test
Driving Skill Average Mean Scores by Groups

Groups:	Mean Scores
Group 3	85.1800
Group 1	84.0943
Group 2	83.1719

Note: The SPSS 6.1 statistical program did not find any statistical difference between any of the three groups at the .05 level. The findings reveal that Group 3 cadets who have military service and less than 59 college hours had the largest mean score at 85.1800. This places Group 3 in the mid-portion of the Very Good scale. Group 1, cadets with no military service and 60 or more college had the second highest mean score at 84.0943. Group 1 was also located in the mid-portion of the Very Good scale. And Group 2, cadets with military service and 0 college hours had the lowest mean score of 83.1719. This group like the other two groups was also located in the mid-portion of the Very Good scale.

Table 19

Achievement Levels by Groups Based on Driving Skill Average Scores

	Group 1	Group 2	Group 3
Excellent	38	14	16
Very Good	79	29	23
Satisfactory	39	19	10
Unsatisfactory	3	2	1
Group n	159	64	50

Note: Group 1-No military service and 60+ college hours, Group 2-Military service and no college hours and, Group 3-Military service and less than 59 college hours. The listed achievement levels for driving skills average score ranges are as follows: Excellent 90-100, Very Good 80-89, Satisfactory 70-79, and Unsatisfactory 0-69. A cadet with an average score of below 70 percent must remediate their driving skill average to at least 70 percent in order to graduate (Houston Police Academy, 1994).

Table 20

Percentage of Achievement Levels by Groups Based on Driving Skill Average Scores

	Group 1	Group 2	Group 3
Excellent	23.90	21.87	32.00
Very Good	49.69	45.31	46.00
Satisfactory	24.53	29.69	20.00
Unsatisfactory	1.88	3.13	2.00
Pct. by Group	100%	100%	100%

Note: Group 1-No military service and 60+ college hours, Group 2-Military service and no college hours and, Group 3-Military service and less than 59 college hours. The listed achievement levels for driving skill average score ranges are as follows: Excellent 90-100, Very Good 80-89, Satisfactory 70-79, and Unsatisfactory 0-69 (Houston Police Academy, 1994).

Therefore, based on the three differing statistical tests performed the investigator accepted the null hypothesis and found that there was not a statistically significant difference between Group 1 & Group 2, Group 2 & Group 3, or Group 1 & 3 in relation to driving skill average scores.

Ho_6: A one-way ANOVA was performed investigating the statistical difference between cadets who have (1) no military service but with sixty hours or more college credit, (2) military service and 0 hours of college credit, and (3) military service and 1-59 hours of college credit in regard to their firearms skill average scores.

The following findings are based on the cadets military/college experience and their firearms skill average scores using a one-way ANOVA at the .05 significance level. The independent variable was the cadets military/college status and the dependent variable was the firearms skill average scores. The lowest average score was 48 while the highest average score was 98.

As shown in Table 21, there was a statistically significant difference between the several groups on firearms skills performance (F=3.81, df= 2/270, p<.05). The investigator utilized a post-hoc Scheffe significance test for statistical significance to determine where the greatest difference occurred.

Table 21

One-Way Analysis of Variance
Summary for Firearms Skills

Source	D.F.	Sum of Squares	Mean Squares	F-Ratio
Between Groups	2	496.4850	248.2425	3.8148
Within Groups	270	17569.7421	65.0731	
Total	272	18066.2271		

Note: The difference between two means is significant if Mean (J) - Mean (I) = 5.7041 {Range} SQRT (1/N(I) + 1/N(J)) with the following value(s) for range: 3.48. Mean scores are listed from low to high according to the evaluated groups. Group 1-No Military service and 60+ college hours, Group 2-Military service and 0 college hours, and Group 3-Military service and less than 59 college hours.

Table 22

Post-hoc Scheffe Test
Firearms Average Skills Mean Scores by Groups

Groups	Mean Scores
Group 1	84.6038
Group 2	86.0156
Group 3*	88.1600

Note: * Indicates statistical significance between the lowest scores and the other group(s). The findings revealed that Group 3, cadets who had military service and less than 59 college hours had the largest mean score of 88.1600. This placed Group 3 in the upper portion of the Very Good scale. Group 2, cadets with military service and 0 college hours had the next highest mean score of 86.0156. Group 2 fell in the mid-portion of the Very Good scale. And Group 1, cadets with no military service and 60 or more college had the lowest mean at 84.6038. However, Group 1 mean scores were still in the Very Good scale.

Table 23

Achievement Levels by Groups Based on Firearms Skill Average Scores

	Group 1	Group 2	Group 3
Excellent	51	24	27
Very Good	78	29	17
Satisfactory	19	9	6
Unsatisfactory	11	2	0
Group n	159	64	50

Note: Group 1-No military service and 60+ college hours, Group 2-Military service and no college hours and, Group 3-Military service and less than 59 college hours. The three cadet groups were placed into four differing levels of achievement. The listed achievement levels regarding the firearms skill average score ranges are as follows: Excellent 90-100, Very Good 80-89, Satisfactory 70-79, and Failure 0-69. Failure to achieve a passing score by a cadet results in a recommendation of termination from the police academy (Houston Police Academy, 1994).

Table 24

Percentage of Achievement Levels by Groups Based on Firearms Skill Average Scores

	Group 1	Group 2	Group 3
Excellent	32.08	37.50	54.00
Very Good	49.05	45.31	34.00
Satisfactory	11.95	14.06	12.00
Failure	6.92	3.13	0.00
Pct. by Group	100%	100%	100%

Note: Group 1-No military service and 60+ college hours, Group 2-Military service and no college hours and, Group 3-Military service and less than 59 college hours. The three cadet groups were placed into four differing levels of achievement. The listed achievement levels regarding the firearms skill average score ranges are as follows: Excellent 90-100, Very Good 80-89, Satisfactory 70-79, and Failure 0-69. Failure to achieve a passing score by a cadet results in a recommendation of termination from the police academy (Houston Police Academy, 1994).

Therefore, based on the statistical tests performed the investigator rejected the null hypothesis and found that there was a statistically significant difference between Group 3 & Group 1. However, the investigator accepted the null hypothesis and stated that there is not a statistically significant difference between Group 2 & Group 3 or Group 2 & Group 1 in relation to firearms skill average scores.

Chapter 5

SUMMARY, FINDINGS, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The Houston Police Department has always been considered a leader in police training in the State of Texas. In fact, the Houston Police Department has graduated 173 classes since Cadet Class #1 graduated over fifty years ago in April 1948. This is a significant period of time because state legislated basic training did not occur until September 1970. It is with that spirit that the Houston Police Department has sought to recruit and train willing individuals to become police officers for the City of Houston.

This research sought to determine if there was a significance difference on performance levels between cadets who had been admitted to the Houston Police Academy either on their college experience or their military service. The results have shown that there was a statistically significant difference in the cadets performance on their reading comprehension scores, state licensing scores, civil service scores, academic average scores, and firearms skill average scores. Yet, only nine cadets were terminated in the five classes studied for failure to pass minimal academic or skill areas within the police academy. Of those nine cadets, five had the college requirements and four were military veterans. The remaining 273 individuals were not eliminated from the investigation and successfully graduated from the Houston Police Academy between 1992 and 1996.

The research also revealed that there was not a statistically significant difference between any of the groups in relation to their driving skill average scores. This can probably be best explained that all applicants must have a driver's license before they become cadets in the Houston Police Academy. Another reason was that the driving skill standards taught at the police academy over the six-month training are unique, which brought them up to a similar level (O'Keefe, 1989).

The investigation was carried out using ratio data and statistically evaluated using a one-way analysis of variance (ANOVA) test. By utilizing the ANOVA testing process the investigator was able to determine (1) strength between independent and dependent variables and (2) strength among three independent variables.

The significance level for the investigation was set at the .05 level. The ANOVA test allows the investigator to examine how much the independent variables affect these dependent variables individually and between the defined groups. The sample n=273 was taken from five classes, one for each year between 1992 and 1996.

Findings

The investigator followed in general the established methodology of Kerlinger (1986) and Borg and Gall 1996) in conducting this research. Therefore, the research findings should be comparatively accurate and will generalize to a larger population with caution. The entire population included all of the cadets between 1992 and 1996 who had either sixty semester hours of college and no military service or had military service and less than sixty hours of college semester hours. The following statements were made regarding each of the six investigated hypotheses in the dissertation.

Ho_1: Based on the statistical tests performed the investigator rejected the null hypothesis and found that there was a statistically significant difference on reading comprehension scores between cadets who had no military and 60 or more hours of college and cadets who had military and 0 hours of college. This finding was also true with cadets who had military and 0 hours of college and cadets who had military and 1-59 hours of college. However, the investigator accepted the null hypothesis that there is not a statistically significant difference between cadets who had no military and 60 or more hours of college and cadets who had military and 1-59 hours of college in regard to reading comprehension scores.

Ho_2: Based on the statistical tests performed the investigator rejected the null hypothesis and found that there was a statistically significant difference between cadets who had no military and 60 or more hours of college and cadets who had military and 0 hours of college in regard to state licensing scores. However, the investigator accepted the null hypothesis that there was not a statistically significant difference between cadets who had military and 0 college hours and cadets who had military and 1-59 college hours in regard to state licensing scores. Additionally, the investigator accepted the null hypothesis that there was not a statistically significant difference between cadets who had no military and 60 or more college hours and cadets who had military and 1-59 college hours in regard to state licensing scores.

Ho_3: Based on the statistical tests performed the investigator rejected the null hypothesis and found that there was a statistically significant difference between cadets who had no military and 60 or more hours of college and cadets who had military and 0 hours of college in regard to civil service scores. However, the investigator accepted the null hypothesis that there was not a statistically significant difference between cadets who had military and 0 college hours and cadets who had military and 1-59 college hours in regard to state licensing scores. Additionally, the investigator accepted the null hypothesis that there was not a statistically significant difference between cadets who had no military and 60 or more college hours and cadets who had military and 1-59 college hours in regard to civil service scores.

Ho_4: Based on the statistical tests performed the investigator rejected the null hypothesis and found that there was a statistically significant difference between cadets who had no military and 60 or more hours of college and cadets who had military and 0 hours of college in regard to academic average scores. However, the investigator accepted the null hypothesis that there was not a statistically significant difference between cadets who had military and 0 college hours and cadets who had military and 1-59 college hours in regard to academic average scores. Additionally, the investigator accepted the null hypothesis that there was not a statistically significant difference between cadets who had no military and 60 or more college hours and cadets who had military and 1-59 college hours in regard to academic average scores.

Ho_5: Based on the statistical tests performed the investigator accepted the null hypothesis and found that there was not a statistically significance difference between any of the three groups investigated. These groups included cadets who had no military service and 60 or more college hours, cadets who had military and 0 college hours, and cadets who had military and 1-59 college hours.

Ho_6: Based on the statistical tests performed the investigator rejected the null hypothesis and found that there was a statistically significant difference between cadets who had military and 1-59 college hours and cadets who had no military and 60 or more college hours in regard to firearms skill average scores. However, the investigator accepted the null hypothesis and found that there was not a statistically significant difference between cadets with military and 0 college hours and cadets with military and 1-59 college hours in regard to firearms skill scores. Additionally, the investigator accepted the null hypothesis that there was not a statistically significant difference between cadets who had no military and 60 or more college hours and cadets who had military and 0 college hours in regard to firearms skill scores.

Finally, the investigator has attempted to present the research in a non-judgmental context of letting the data and statistical analysis speak for itself. The data indicate that there are areas of statistically significant differences; however, the failure rate is fairly equal. It was pointed out earlier in this chapter that only nine cadets were terminated for academic reasons, among them five cadets admitted on their academic experience and four cadets are military veterans.

Discussion

The premise of the investigation was to seek and/or verify beliefs regarding the exemption policy by the City of Houston as to whether or not there are statistically significant differences between Houston Police cadets who were admitted to the police academy via the military waiver. In the discussion phase, the investigator supported the findings with literature in regard to each of the hypotheses.

In Hypothesis One, the investigator rejected the null hypothesis and found that there was a statistically significant difference on reading comprehension scores between Group 1 cadets who had no military and 60 or more hours of college and Group 2 cadets who had military and 0 hours of college. This finding was also true with Group 2 cadets who had military and 0 hours of college and Group 3 cadets who had military and 1-59 hours of college. However, the investigator accepted the null hypothesis that there is not a statistically significant difference between Group 1 cadets who had no military and 60 or more hours of college and Group 3 cadets who had military and 1-59 hours of college in regard to reading comprehension scores.

This hypothesis had the greatest of the disparities, 8.94370 mean score points separated Group 2 cadets who had military and 0 college hours and Group 1 cadets who had no military and 60 or more college hours. According to Campa (1993) the reading comprehension scores are the strongest predictor of how well a cadet will do in the police academy. This investigator validates Campa's dissertation hypothesis and supports his work in the area of reading comprehension. Group 3 cadets who had military and 1-59 college hours fell in between the other two groups.

In Hypothesis Two, the investigator rejected the null hypothesis and found that there was a statistically significant difference between Group 1 cadets who had no military and 60 or more hours of college and Group 2 cadets who had military and 0 hours of college in regard to state licensing scores. However, the investigator accepted the null hypothesis that there was not a statistically significant difference between Group 2 cadets who had military and 0 college hours and Group 3 cadets who had military and 1-59 college hours in regard to state licensing scores. Additionally, the investigator accepted the null hypothesis that there was not a statistically significant difference between Group 1 cadets who had no military and 60 or more college hours and Group 3 cadets who had military and 1-59 college hours in regard to state licensing scores.

This hypothesis presented a disparity of 2.6097 mean score points which gave a .05 statistically significant difference between Group 2 cadets who had military and 0 college hours and Group 1 cadets who had no military and 60 or more college hours. This hypothesis had the fourth largest disparity between the highest and lowest groups.

The significant level between those with higher education and those with military alone supports Adams (1998) findings. Adams found that while reading comprehension scores is a stronger indicator of scores on the state licensing test that the amount of higher education a cadet had also plays a critical role.

In Hypothesis Three, the investigator rejected the null hypothesis and found that there was a statistically significant difference between Group 1 cadets who had no military and 60 or more hours of college and Group 2 cadets who had military and 0 hours of college in regard to civil service scores. However, the investigator accepted the null hypothesis that there was not a statistically significant difference between Group 2 cadets who had military and 0 college hours and Group 3 cadets who had military and 1-59 college hours in regard to state licensing scores. In addition, the investigator accepted the null hypothesis that there was not a statistically significant difference between Group 1 cadets who had no military and 60 or more college hours and Group 3 cadets who had military and 1-59 college hours in regard to civil service scores.

This hypothesis presented a disparity of 2.6623 mean score points which gave a .05 statistically significant difference between Group 2 cadets who had military and 0 college hours and Group 1 cadets who had no military and 60 or more college hours. This hypothesis had the third largest disparity between the highest and lowest groups. These findings could be supported by the fact that the civil service test is given toward the end of the cadets training at the academy and all groups have prepared the same length of time, taken similar notes, heard the same lectures, and taken the same primary examinations. Other research could not be located that examined civil service examinations or scores, so the investigators findings must stand alone until they are replicated in a similar type of study.

In Hypothesis Four, the investigator rejected the null hypothesis and found that there was a statistically significant difference between Group 1 cadets who had no military and 60 or more hours of college and Group 2 cadets who had military and 0 hours of college in regard to academic average scores. However, the investigator accepted the null hypothesis that there was not a statistically significant difference between Group 2 cadets who had military and 0 college hours and Group 3 cadets who had military and 1-59 college hours in regard to academic average scores. Additionally, the investigator accepted the null hypothesis that there was not a statistically significant difference between Group 1 cadets who had no military and 60 or more college hours and Group 3 cadets who had military and 1-59 college hours in regard to academic average scores.

This hypothesis presented a disparity of 2.4447 points which gave a .05 statistically significant difference between Group 2 cadets who had military and 0 college hours and Group 1 cadets who had no military and 60 or more college hours. This hypothesis had the fifth largest disparity between the highest and lowest groups.

Oettmeier (1982) found a statistical correlation between a cadet's educational level and his/her academic scores. The findings of this investigation are consistent with Oettmeier's statistical analysis and support his findings regarding educational levels and academic averages.

In Hypothesis Five, the investigator accepted the null hypothesis and found that there was not a statistically significance difference between any of the three groups investigated. These groups included Group 1 cadets who had no military service and 60 or more college hours, Group 2 cadets who had military and 0 college hours, and Group 3 cadets who had military and 1-59 college hours.

This hypothesis presented a disparity of 2.0081 points, which did not provide a statistically significant difference at the .05 level between any groups. Therefore, it has the least disparity between the groups.

The findings could presumably be justified since one of the requirements to join the Houston Police Department is a valid driver's license. Another explanation may have been that the driving skills taught at the law enforcement academies are unique to law enforcement and not generally used elsewhere. O'Keefe's (1989) dissertation supports the concept of a unique type of training that is required for police officers. In his findings, O'Keefe describes the unusual driving differences between a police officer who periodically needs to speed, run red lights, etc. to apprehend a suspect and a citizen who would rarely drive in that manner.

In Hypothesis Six, the investigator rejected the null hypothesis and found that there was a statistically significant difference between Group 3 cadets who had military and 1-59 college hours and Group 1 cadets who had no military and 60 or more college hours in regard to firearms skill average scores. However, the investigator accepted the null hypothesis and found that there was not a statistically significant difference between Group 2 cadets with military and 0 college hours and Group 3 cadets with military and 1-59 college hours in regard to firearms skill scores. Additionally, the investigator accepted the null hypothesis that there was not a statistically significant difference between Group 1 cadets who had no military and 60 or more college hours and Group 2 cadets who had military and 0 college hours in regard to firearms skill scores.

This hypothesis presented a disparity of 3.5562 mean score points which gave a .05 statistically significant difference between Group 3 cadets who had military and 1-59 college hours and Group 1 cadets who had no military and 60 or more college hours. This hypothesis had the second largest disparity between the highest and lowest groups. The findings supported Kindel's (1997) research that military veterans, particularly cadets who were military officers and, therefore, had some hours of college are familiar and experienced with weapons and shoot well.

Conclusions

This investigation researched six hypotheses in relation to educational levels versus military service. The investigation measured the performance of certain critical policing tasks by cadets. Based on the findings of this investigation, the following conclusions were drawn.

1. It was concluded that cadets without military service and 60 or more hours of college performed better than cadets with military service and no college when reading comprehension scores were examined. Similarly, cadets without military service and 60 or more hours of college performed better than cadets with military service and 59 or less college hours in reading comprehension scores.
2. As to state licensing scores, it can be concluded that cadets without military service and 60 or more semester hours of college performed better than cadets with military service and no college.
3. The investigator concluded that in terms of civil service scores that cadets without military service and

60 or more semester hours of college performed better than cadets with military service and no college.

4. Regarding academic average scores, it was concluded that cadets without military service and 60 or more semester hours of college performed better than cadets with military service and no college.
5. It can be concluded that the number of college hours or whether or not the cadet possesses prior military service does not affect driving skill average scores.
6. In regards to firearms skill average scores, cadets with military service and 59 or less semester hours of college performed better than cadets with 60 or more hours of college and no military service.

Recommendations

This investigation endeavored to seek new knowledge in the field of law enforcement training. The information gleaned also assisted in the development in the body of research for this growing field. The aim of the investigation was to simply determine the statistical differences in the level of achievement between cadets who entered the police academy based on either their educational or military experience. The specific recommendations that the investigator had are as follows:

1. It is recommended that a higher education requirement be mandatory even for those with military service. The exact number of hours that should be required needs to be investigated through an independent study directed at researching semester hours as variables. While it is true military veterans without college graduated at a similar rate as those with college, they consistently scored lower throughout the academy academically.
2. It is recommended that additional research be conducted in the area of law enforcement training. Specifically, further research should include new variables that might affect an individual level of performance, i.e. age, marital status, or discipline received.
3. It is recommended that this study be replicated in other police departments, because it is only through research, debate, and evaluation that the field of law enforcement will progress in its attempt to become a professional occupation.
4. It is suggested that follow up research be conducted two years after the cadets graduate from the academy. This information would extend the investigation into the

various differences between the performance levels between those cadets who entered the academy based on their educational credentials versus those who entered on the military service waiver.

APPENDIX

Appendix A

Permission Letters

CITY OF HOUSTON

INTER OFFICE CORRESPONDENCE

TO: C. O. Bradford
Chief of Police

VIA: R. E. Adams, Administration Manager
Training Division

M. D. Graham, Captain
Training Division

F. E. Yorek, Assistant Chief
Professional Development Command

J. L. Dotson, Assistant Chief
Administrative Coordinator

FROM: T. Johnson, Training Administrator
Training Division

DATE: July 10, 1997

SUBJECT: **Dissertation Data Collection**

This correspondence is in reference to our conversation at Donna Blount's retirement party concerning my dissertation. I have been given permission to begin the process to collect data by Dr. Lillian Poats, Chairperson of my dissertation committee. As part of that process, I need you to formally approve my data collection at the academy.

The data that I will capture will include the following variables:

Independent Data:
Reading Comprehension Test Scores
TCLEOSE Scores
Civil Service Scores
Academic Average Scores
Driving Average Skill Scores
Firearms Average Skill Scores

Dependent Data:
No Military Service & 60 College Hours
Military Service & 0 College Hours
Military Service & 1-29 College Hours
Military Service & 30-59 College Hours

To protect the anonymity of the cadets no names will be captured during the research process. Additionally, all (5) cadet classes will be chosen at random from a five-year period beginning in 1992 and ending in 1996.

OFFICE OF THE
[illegible]
97 JUL 16 AM10:41
MD

It has been over five years since the department instituted the military waiver for entrance into the police academy. This dissertation will compare and contrast the two groups based on their achievement levels.

Once I have completed my findings, I will forward them to your office for your inspection prior to publication. Your approval of this dissertation means a great deal to me and hopefully will make a contribution to the field of law enforcement.

Should you have any further questions regarding this matter, please feel free to contact me at 281-230-2411.

T. Johnson

T. Johnson, Training Administrator
Training Division

R E Adams

— Approved!

ASSISTANT CHIEF
[illegible]
97 JUL 14 PM 4:44

PROFESSIONAL
DEVELOPMENT SERVICES
97 JUL 11 AM11:04

APPROVED

Major James E. Kindel (Ret. U.S. Army)
Houston Police Academy
Civilian Supervisor
Houston Police Department
281-230-2300

October 2, 1997

Thomas A. Johnson
Doctoral Student
Texas Southern University
Houston, Texas

Dear Mr. Johnson:

This correspondence is in reference to our conversation on September 30, 1997 regarding how well cadets with military service compare to cadets who have no military service and sixty hours college credit.

It is my belief, based on my military service, HPD service, and educational credentials (Masters Degree) that police cadets with sixty hours or more college credit hours will do quite a bit better on academic tests. On the other hand, cadets with military service should do much better on the skill's portion of the academy, which includes firearms and drivers training. Finally, I suspect cadets who possess military service and a few hours of college will fall somewhere between the two extreme groups.

Should you require any further information, please feel free to contact me.

James E. Kindel
James E. Kindel
Houston Police Academy

Cadet Counselor
Houston Police Academy
281-230-2300
Robbie Phelps, M.A., M.Ed.

October 9, 1997

Tom Johnson
Training Administrator
Houston Police Academy
17000 Aldine Westfield Rd.
Houston, Texas 77073

Dear Mr. Johnson:

The Reading Comprehension Test (RCT) scores play a vital role in determining who can enter the Houston Police Academy as a police trainee. The current minimal RCT score to enter the academy has been validated and is set at 15.

The RCT score is also a good indicator of how well the police cadet will perform academically. As per your request, I have divided the RCT scores into four levels of achievement based on my years of experience.

1. *Excellent : 28-30*
2. *Very good: 24-27*
3. *Satisfactory: 21-23*
4. *Minimum: 15-20*

Should you have any questions regarding this matter, please contact me.

Sincerely,

Robbie Phelps, Counselor
Houston Police Academy

TEXAS
COMMISSION ON LAW ENFORCEMENT
OFFICER STANDARDS AND EDUCATION
6330 U.S. Highway 290 East, Suite 200 Austin, Texas 78723

D.C. Jim Dozier
Executive Director

Phone: 512-450-0188
Fax: 512-406-3686

October 3, 1997

Mr. Tom Johnson
Houston Police Academy
17000 Aldine-Westfield
Houston, Texas 77073

Dear Mr. Johnson:

This correspondence is in reference to our conversation at the Texas Commission on Law Enforcement, Training Coordinator's Workshop in San Antonio, Texas. I have broken the performance level of the Basic Peace Officer Licensing Examination into four distinct categories. The levels of achievement are as follows:

- 87-100 Excellent
- 77-86 Very Good
- 70-76 Satisfactory
- 0-69 Unsatisfactory

The Peace Officer Licensing Examination is the validated method used to determine the basic knowledge level of an individual seeking a peace officer license in the State of Texas. The curriculum that must be taught in order to qualify to take the examination is a minimum of 560 hours, over a myriad of objectives and skills.

If you have any further questions, please call.

Sincerely,

Kenneth R. Sander

Kenneth R. Sander
Director
Examinations Division

Appendix B

Law Enforcement Statistical Data

U.S. Department of Justice
Office of Justice Programs
Bureau of Justice Statistics

Law Enforcement Management and Administrative Statistics, 1993: Data for Individual State and Local Agencies with 100 or More Officers

By Brian A. Reaves, Ph.D.
BJS Statistician

and

Pheny Z. Smith, Ph.D.
BJS Statistician

September 1995, NCJ-148825

		Requirements for new officer recruits							
		Minimum educational requirement					Number of training hours required		
County	Name of agency	4-year college degree	2-year college degree	Some college[a]	High school diploma	Residency requirement	Total	Class	Field
ALABAMA									
Etowah	Gadsden Police	.	.	.	X	C	480	240	240
Houston	Dothan Police	.	.	.	X	.	1,360	320	1,040
Jefferson	Jefferson County Sheriff	.	.	.	X	C	480	480	0
Jefferson	Birmingham Police	.	.	.	X	.	1,200	720	480
Madison	Huntsville Police	.	.	.	X	M	1,240	760	480
Mobile	Mobile County Sheriff	.	.	.	X	C	800	480	320
Mobile	Mobile Police	.	.	.	X	O	1,120	640	480
Montgomery	Montgomery County Sheriff	.	.	.	X	.	560	240	320
Montgomery	Montgomery Police	.	.	.	X	O	720	720	0
Tuscaloosa	Tuscaloosa Police	.	.	.	X	.	1,182	712	480
ALASKA									
Anchorage	Anchorage Police	.	.	.	X	.	1,400	840	560
ARIZONA									
Maricopa	Maricopa County Sheriff	.	.	.	X	.	1,040	640	400
Maricopa	Chandler Police	.	.	.	X	.	1,000	520	480
Maricopa	Glendale Police	.	.	.	X	.	1,120	640	480
Maricopa	Mesa Police	.	.	.	X	S	1,160	640	520
Maricopa	Phoenix Police	.	.	.	X	C	920	440	480
Maricopa	Scottsdale Police	.	.	X	.	S	920	440	480
Maricopa	Tempe Police	.	.	.	X	.	1,000	680	320
Pima	Pima County Sheriff	.	.	.	X	S	1,160	680	480
Pima	Tucson Police	.	.	.	X	.	1,160	640	520
Pinal	Pinal County Sheriff	.	.	.	X	O	440	440	0
ARKANSAS									
Jefferson	Pine Bluff Police	.	.	.	X	O	380	320	60
Pulaski	Pulaski County Sheriff	.	.	.	X	.	800	320	480
Pulaski	Little Rock Police	.	.	.	X	S	1,120	640	480
Pulaski	North Little Rock Police	.	.	.	X	.	1,380	400	980
Sebastian	Fort Smith Police	.	.	.	X	O	880	400	480
CALIFORNIA									
Alameda	Alameda County Sheriff	.	.	.	X	.	1,408	888	520
Alameda	Berkeley Police	.	.	X	.	.	1,380	800	580
Alameda	Fremont Police	.	.	.	X	.	1,700	900	800
Alameda	Hayward Police	.	.	.	X	.	1,040	560	480
Alameda	Oakland Police	.	.	.	X	.	740	655	85
Contra Costa	Contra Costa County Sheriff	.	.	.	X	O	560	80	480
Contra Costa	Concord Police	.	.	X	.	.	320	0	320
Contra Costa	Richmond Police	.	.	X	.	.	1,380	780	600
El Dorado	El Dorado County Sheriff	.	.	.	X	.	640	400	240
Fresno	Fresno County Sheriff	.	.	X	.	.	1,182	872	480
Fresno	Fresno Police	.	.	X	.	.	800	0	800
Kern	Kern County Sheriff	.	.	.	X	C	1,077	517	560
Kern	Bakersfield Police	.	.	.	X	O	1,320	640	680
Los Angeles	Los Angeles County Sheriff	.	.	.	X	.	848	845	0
Los Angeles	Beverly Hills Police	.	.	X	.	.	1,400	720	680
Los Angeles	Burbank Police	.	.	.	X	.	920	720	200
Los Angeles	Compton Police	.	.	.	X	.	800	728	72
Los Angeles	Culver City Police	.	.	.	X	.	720	720	0
Los Angeles	Downey Police	.	.	.	X	.	680	425	256
Los Angeles	El Monte Police	.	.	.	X	.	1,368	728	640
Los Angeles	Glendale Police	.	.	.	X	O	864	100	764
Los Angeles	Inglewood Police	.	.	.	X	.	1,080	80	1,000
Los Angeles	Long Beach Police	.	.	.	X	.	2,080	880	1,200
Los Angeles	Los Angeles Police	.	.	.	X	.	1,011	971	40
Los Angeles	Los Angeles Airport Police	.	.	.	X	.	1,224	624	600
Los Angeles	Los Angeles School Police	.	.	.	X	.	1,690	730	960
Los Angeles	Pasadena Police	.	.	.	X	.	1,180	700	480
Los Angeles	Pomona Police	.	.	.	X	.	1,609	729	880
Los Angeles	Santa Monica Police	.	.	.	X	.	720	428	292
Los Angeles	Torrance Police	.	.	.	X	.	1,840	640	1,200
Los Angeles	West Covina Police	.	.	X	.	.	1,100	600	500
Marin	Marin County Sheriff	.	.	.	X	.	1,136	656	480
Monterey	Monterey County Sheriff	.	.	.	X	.	1,040	560	480
Monterey	Salinas Police	.	.	.	X	.	1,287	787	480

BEST COPY AVAILABLE

County	Name of agency	Requirements for new officer recruits							
		Minimum educational requirement					Number of training hours required		
		4-year college degree	2-year college degree	Some college*	High school diploma	Residency requirement	Total	Class	Field
CALIFORNIA (cont.)									
Orange	Orange County Sheriff-Coroner	.	.	.	X	.	888	800	88
Orange	Anaheim Police	.	.	.	X	.	1,600	960	640
Orange	Brea Police	.	.	.	X	.	1,320	840	480
Orange	Costa Mesa Police	.	.	.	X	S	1,320	840	480
Orange	Fullerton Police	.	.	.	X	.	1,368	888	480
Orange	Garden Grove Police	.	.	.	X	O	580	80	480
Orange	Huntington Beach Police	.	.	.	X	.	640	0	640
Orange	Irvine Police	.	.	.	X	.	1,480	840	640
Orange	Newport Beach Police	.	.	.	X	.	1,300	650	650
Orange	Orange Police	.	.	.	X	.	1,460	970	480
Orange	Santa Ana Police	.	.	.	X	O	1,528	888	640
Riverside	Riverside County Sheriff	.	.	.	X	.	1,420	780	640
Riverside	Corona Police	.	.	.	X	S	1,340	700	640
Riverside	Riverside Police	.	.	.	X	.	800	800	0
Sacramento	Sacramento County Sheriff	.	.	.	X	.	881	881	0
Sacramento	Sacramento Police	.	.	X	.	O	1,780	800	980
San Bernardino	San Bernardino County Sheriff	.	.	.	X	.	1,000	800	200
San Bernardino	Fontana Police	.	.	X	.	.	1,400	680	720
San Bernardino	Ontario Police	.	.	.	X	.	520	40	480
San Bernardino	Rialto Police	.	.	.	X	O	1,380	720	640
San Bernardino	San Bernardino Police	.	.	.	X	.	176	176	0
San Diego	San Diego County Sheriff	.	.	.	X	.	1,120	720	400
San Diego	Chula Vista Police	.	.	.	X	.	844	341	503
San Diego	El Cajon Police	.	.	.	X	.	1,428	788	640
San Diego	Escondido Police	.	.	.	X	.	1,600	1,000	600
San Diego	Oceanside Police	.	.	.	X	.	1,120	640	480
San Diego	San Diego Police	.	.	.	X	O	1,736	936	800
San Diego	San Diego Harbor Police	.	.	.	X	.	980	580	400
San Francisco	San Francisco Police	.	.	.	X	M	1,280	800	480
San Francisco	Bay Area Rapid Transit Police	.	.	X	.	.	1,440	720	720
San Francisco	San Francisco Airport Police	.	.	.	X	.	1,380	780	600
San Joaquin	San Joaquin County Sheriff	.	.	.	X	.	1,760	720	1,040
San Joaquin	Stockton Police	.	.	.	X	O	1,896	856	1,040
San Luis Obispo	San Luis Obispo County Sheriff	.	.	.	X	.	—	720	—
San Mateo	San Mateo County Sheriff	.	.	.	X	.	1,296	656	640
San Mateo	Daly City Police	.	.	.	X	.	1,280	700	560
Santa Barbara	Santa Barbara County Sheriff	.	.	.	X	.	1,155	675	480
Santa Barbara	Santa Barbara Police	.	.	.	X	.	1,528	888	640
Santa Clara	Santa Clara County Sheriff	.	.	.	X	.	1,380	720	640
Santa Clara	San Jose Police	.	.	X	.	O	1,400	840	560
Santa Clara	Santa Clara Police	.	.	X	.	.	580	80	480
Santa Clara	Sunnyvale Police	.	X	.	.	.	1,168	782	406
Santa Cruz	Santa Cruz County Sheriff	.	.	.	X	.	1,300	700	600
Solano	Vallejo Police	.	.	.	X	.	688	8	680
Sonoma	Sonoma County Sheriff-Coroner	.	.	.	X	.	1,218	656	560
Sonoma	Santa Rosa Police	.	.	.	X	O	1,280	640	640
Stanislaus	Stanislaus County Sheriff	.	.	.	X	.	1,040	560	480
Stanislaus	Modesto Police	.	.	.	X	.	1,448	680	768
Tulare	Tulare County Sheriff	.	.	.	X	.	951	751	200
Ventura	Ventura County Sheriff	.	.	.	X	.	1,202	822	380
Ventura	Oxnard Police	.	.	.	X	.	1,600	840	760
Ventura	Simi Valley Police	.	.	.	X	.	—	—	—
Ventura	Ventura Police	.	.	.	X	.	1,488	800	688
COLORADO									
Adams	Adams County Sheriff	.	.	.	X	O	400	40	360
Adams	Westminster Police	.	X	.	.	.	1,060	520	540
Arapahoe	Arapahoe County Sheriff	.	.	X	.	.	822	422	400
Arapahoe	Aurora Police	.	.	.	X	.	1,440	800	640
Boulder	Boulder Police	X	.	.	.	.	1,040	560	480
Denver	Denver Police	.	.	.	X	M	1,583	1,033	560
El Paso	El Paso County Sheriff	.	.	.	X	.	380	340	40
El Paso	Colorado Springs Police	.	.	.	X	.	836	375	560
Jefferson	Jefferson County Sheriff	.	.	.	X	.	761	521	240
Jefferson	Arvada Police	X	.	.	.	.	880	400	480
Jefferson	Lakewood Police	X	.	.	.	.	1,200	680	520
Larimer	Larimer County Sheriff	.	.	.	X	C	600	240	360
Larimer	Fort Collins Police	.	.	X	.	.	980	400	580
Pueblo	Pueblo Police	.	.	X	.	.	—	—	—

BEST COPY AVAILABLE

		Requirements for new officer recruits							
		Minimum educational requirement							
County	Name of agency	4-year college degree	2-year college degree	Some college*	High school diploma	Residency requirement	Number of training hours required: Total	Class	Field
CONNECTICUT									
Fairfield	Bridgeport Police	·	·	·	X	·	1,442	962	480
Fairfield	Danbury Police	·	·	·	X	·	240	200	40
Fairfield	Greenwich Police	·	·	·	X	·	—	480	—
Fairfield	Norwalk Police	·	·	·	X	O	840	600	240
Fairfield	Stamford Police	·	·	·	X	·	647	567	80
Hartford	Bristol Police	·	·	·	X	·	—	480	—
Hartford	East Hartford Police	·	·	·	X	·	80	80	0
Hartford	Hartford Police	·	·	·	X	·	1,000	800	200
Hartford	New Britain Police	·	·	·	X	O	480	80	400
Hartford	West Hartford Police	·	·	·	X	O	1,120	560	560
New Haven	Meriden Police	·	·	·	X	·	580	400	180
New Haven	Milford Police	·	·	·	X	O	720	560	180
New Haven	Waterbury Police	·	·	·	X	·	678	598	80
New Haven	West Haven Police	·	·	·	X	·	—	—	—
DELAWARE									
New Castle	New Castle County Police	·	·	·	X	·	1,172	852	320
New Castle	Wilmington Police	·	·	·	X	M	1,440	720	720
DISTRICT OF COLUMBIA									
Washington, D.C.	Washington Metropolitan Police	·	·	·	X	O	1,354	794	560
Washington, D.C.	Metro Transit Police	·	·	·	X	·	1,480	1,080	400
Washington, D.C.	Metropolitan Airports Authority	·	·	·	X	·	560	480	80
FLORIDA									
Alachua	Alachua County Sheriff	·	·	·	X	C	640	320	320
Alachua	Gainesville Police	·	X	·	·	·	880	700	180
Bay	Bay County Sheriff	·	·	·	X	C	960	560	400
Brevard	Brevard County Sheriff	·	·	·	X	C	1,520	800	720
Brevard	Melbourne Police	·	·	·	X	·	—	—	640
Broward	Broward County Sheriff	·	·	·	X	S	1,140	760	380
Broward	Coral Springs Police	·	·	·	X	·	1,260	740	520
Broward	Davie Police	·	·	·	X	O	1,260	740	520
Broward	Fort Lauderdale Police	·	·	·	X	·	1,265	745	520
Broward	Hollywood Police	·	·	·	X	·	1,260	740	520
Broward	Pembroke Pines Police	·	·	·	X	·	1,219	739	480
Broward	Plantation Police	·	·	·	X	·	28	24	4
Broward	Pompano Beach Police	·	·	·	X	O	720	80	640
Broward	Sunrise Police	·	·	·	X	·	1,140	740	400
Charlotte	Charlotte County Sheriff	·	·	·	X	S	820	808	12
Citrus	Citrus County Sheriff	·	·	·	X	S	1,080	600	480
Clay	Clay County Sheriff	·	·	·	X	·	560	40	520
Collier	Collier County Sheriff	·	·	·	X	S	1,110	590	520
Dade	Metro-Dade Police	·	·	·	X	C	1,336	1,216	120
Dade	Coral Gables Police	·	X	·	·	S	1,200	720	480
Dade	Hialeah Police	·	·	·	X	·	1,400	720	680
Dade	Miami Police	·	·	·	X	·	1,480	840	640
Dade	Miami Beach Police	·	·	·	X	·	800	560	240
Duval	Jacksonville Sheriff	·	·	·	X	·	1,350	780	570
Escambia	Escambia County Sheriff	·	·	·	X	·	1,100	620	480
Escambia	Pensacola Police	·	·	·	X	·	1,240	600	640
Hernando	Hernando County Sheriff	·	·	·	X	C	1,105	625	480
Hillsborough	Hillsborough County Sheriff	·	·	·	X	C	1,088	540	548
Hillsborough	Tampa Police	·	·	·	X	·	1,320	540	780
Indian River	Indian River County Sheriff	·	·	·	X	·	1,160	640	520
Lake	Lake County Sheriff	·	·	·	X	C	—	400	—
Lee	Lee County Sheriff	·	·	·	X	S	1,100	600	500
Lee	Cape Coral Police	·	·	X	·	·	1,070	620	450
Lee	Fort Myers Police	·	·	·	X	C	1,128	648	480
Leon	Leon County Sheriff	·	·	·	X	C	—	—	480
Leon	Tallahassee Police	·	X	·	·	·	1,200	640	560
Manatee	Manatee County Sheriff	·	·	·	X	·	1,464	776	688
Marion	Marion County Sheriff	·	·	·	X	C	1,050	650	400
Marion	Ocala Police	·	·	·	X	O	1,140	660	480
Martin	Martin County Sheriff	·	·	·	X	O	1,280	760	520
Monroe	Monroe County Sheriff	·	·	·	X	C	840	520	320

BEST COPY AVAILABLE

County	Name of agency	Requirements for new officer recruits							
		Minimum educational requirement					Number of training hours required		
		4-year college degree	2-year college degree	Some college*	High school diploma	Residency requirement	Total	Class	Field
FLORIDA (cont.)									
Okaloosa	Okaloosa County Sheriff	.	.	.	X	C	790	630	160
Orange	Orange County Sheriff	.	.	.	X	.	1,120	560	560
Orange	Orlando Police	.	.	.	X	S	1,336	736	600
Osceola	Osceola County Sheriff	.	.	.	X	C	680	40	640
Palm Beach	Palm Beach County Sheriff	.	.	.	X	.	1,100	680	420
Palm Beach	Boca Raton Police	.	.	.	X	.	640	600	40
Palm Beach	Boynton Beach Police	.	.	.	X	.	440	80	360
Palm Beach	Delray Beach Police	.	.	.	X	.	1,140	660	480
Palm Beach	West Palm Beach Police	.	.	.	X	O	1,128	648	480
Pasco	Pasco County Sheriff	.	.	.	X	C	640	40	600
Pinellas	Pinellas County Sheriff	.	.	.	X	C	1,282	722	560
Pinellas	Clearwater Police	.	.	.	X	C	1,400	760	640
Pinellas	Largo Police	.	X	.	.	.	—	—	—
Pinellas	St. Petersburg Police	.	.	.	X	O	1,280	720	560
Polk	Polk County Sheriff	.	.	.	X	C	592	32	560
Polk	Lakeland Police	.	.	.	X	.	1,120	640	480
St. John	St. John County Sheriff	.	.	.	X	C	440	120	320
St. Lucie	St. Lucie County Sheriff	.	.	.	X	O	829	817	12
St. Lucie	Fort Pierce Police	.	.	.	X	.	1,180	820	360
Sarasota	Sarasota County Sheriff	.	.	X	.	C	1,330	650	680
Sarasota	Sarasota Police	.	.	.	X	.	1,288	728	560
Seminole	Seminole County Sheriff	.	.	.	X	.	446	16	430
Volusia	Volusia County Sheriff	.	.	.	X	.	936	408	528
Volusia	Daytona Beach Police	.	.	.	X	O	780	200	580
GEORGIA									
Bibb	Bibb County Sheriff	.	.	.	X	.	240	240	0
Bibb	Macon Police	.	.	.	X	O	780	600	180
Chatham	Chatham County Police	.	.	.	X	.	280	280	0
Chatham	Savannah Police	.	.	X	.	S	800	280	520
Clarke	Athens-Clarke County Police	.	.	.	X	.	600	280	320
Clayton	Clayton County Police	.	.	.	X	.	1,160	640	520
Cobb	Cobb County Police	.	.	.	X	.	1,360	880	480
Cobb	Cobb County Sheriff	.	.	.	X	.	378	280	98
Cobb	Marietta Police	.	.	.	X	.	—	280	—
De Kalb	De Kalb County Police	.	.	.	X	.	1,040	640	400
Dougherty	Albany Police	.	.	X	.	.	760	280	480
Fulton	Fulton County Police	.	X	.	.	.	800	320	480
Fulton	Atlanta Police	.	.	.	X	.	980	740	240
Gwinnett	Gwinnett County Police	.	.	.	X	.	882	720	162
Muscogee	Columbus Police	.	.	X	.	.	1,030	500	530
Richmond	Richmond County Sheriff	.	.	.	X	.	20	10	10
Richmond	Augusta Police	.	.	.	X	O	960	380	580
HAWAII									
Hawaii	Hawaii County Police	.	.	.	X	S	1,248	824	424
Honolulu	Honolulu Police	.	.	.	X	S	1,768	1,248	520
Kauai	Kauai County Police	.	.	.	X	S	1,000	640	360
Maui	Maui County Police	.	.	.	X	C	1,866	1,386	480
IDAHO									
Ada	Boise Police	.	.	X	.	.	940	300	640
ILLINOIS									
Cook	Cook County Police	.	.	.	X	.	664	400	264
Cook	Cook County Forest Preserve	.	.	.	X	.	—	—	—
Cook	Arlington Heights Police	.	.	.	X	.	720	400	320
Cook	Chicago Police	.	.	.	X	M	1,100	700	400
Cook	Evanston Police	.	X	.	.	.	880	400	480
Cook	Oak Lawn Police	.	.	.	X	.	1,004	444	560
Cook	Oak Park Police	.	X	.	.	.	1,099	427	672
Cook	Schaumburg Police	.	X	.	.	.	560	400	160
Cook	Skokie Police	.	.	X	.	O	809	529	280
Du Page	Du Page County Sheriff	.	.	.	X	C	800	400	400
Du Page	Naperville Police	.	X	.	.	.	1,180	400	780
Kane	Aurora Police	.	.	.	X	.	800	400	400
Kane	Elgin Police	.	.	.	X	M	880	400	480

Law Enforcement Management and Administrative Statistics, 1993

BEST COPY AVAILABLE

		Requirements for new officer recruits							
		Minimum educational requirement							
County	Name of agency	4-year college degree	2-year college degree	Some college*	High school diploma	Residency requirement	Number of training hours required: Total	Class	Field
ILLINOIS (cont.)									
Lake	Lake County Sheriff	-	-	-	X	-	480	0	480
Lake	Waukegan Police	-	-	-	X	M	800	400	400
McHenry	McHenry County Sheriff	-	-	-	X	C	160	160	0
Macon	Decatur Police	-	-	X	-	M	960	400	560
Peoria	Peoria Police	-	-	-	X	M	960	400	560
Sangamon	Springfield Police	-	-	-	X	M	1,600	400	1,200
Will	Will County Sheriff	-	-	-	X	C	800	400	400
Will	Joliet Police	-	-	-	X	-	1,000	400	600
Winnebago	Winnebago County Sheriff	-	-	-	X	C	904	400	504
Winnebago	Rockford Police	-	-	-	X	M	1,040	400	640
INDIANA									
Allen	Fort Wayne Police	-	-	-	X	C	1,680	720	960
Delaware	Muncie Police	-	-	-	X	C	80	40	40
Lake	Lake County Sheriff	-	-	-	X	C	480	282	198
Lake	East Chicago Police	-	-	-	X	C	320	320	0
Lake	Gary Police	-	-	-	X	M	960	480	480
Lake	Hammond Police	-	-	-	X	M	616	56	560
Madison	Anderson Police	-	-	-	X	C	960	480	480
Marion	Marion County Sheriff	-	-	-	X	C	960	840	120
Marion	Indianapolis Police	-	-	-	X	C	1,392	752	640
St. Joseph	South Bend Police	-	-	-	X	C	768	480	288
Vanderburgh	Evansville Police	-	-	-	X	C	1,680	720	960
Vigo	Terre Haute Police	-	-	-	X	C	40	40	0
IOWA									
Black Hawk	Waterloo Police	-	-	-	X	O	880	400	480
Linn	Cedar Rapids Police	-	-	-	X	S	540	540	0
Polk	Des Moines Police	-	-	-	X	O	816	752	64
Scott	Davenport Police	-	-	-	X	O	960	400	560
Woodbury	Sioux City Police	-	-	X	-	O	1,040	400	640
KANSAS									
Douglas	Lawrence Police	-	-	-	X	-	1,200	720	480
Johnson	Overland Park Police	-	-	-	X	C	700	500	200
Sedgwick	Wichita Police	-	-	-	X	O	1,280	720	560
Shawnee	Topeka Police	-	-	-	X	-	960	480	480
Wyandotte	Kansas City Police	-	-	-	X	M	1,520	800	720
KENTUCKY									
Fayette	Lexington-Fayette County Police	-	-	-	X	-	2,880	800	2,080
Jefferson	Jefferson County Police	-	-	-	X	C	960	400	560
Jefferson	Louisville Police	-	-	-	X	-	2,240	800	1,440
LOUISIANA									
Bossier	Bossier Police	-	-	-	X	S	680	280	400
Caddo	Caddo Parish Sheriff	-	-	-	X	C	880	240	640
Caddo	Shreveport Police	-	-	X	-	-	1,960	520	1,440
Calcasieu	Calcasieu Parish Sheriff	-	-	-	X	-	280	200	80
Calcasieu	Lake Charles Police	-	-	-	X	M	1,200	240	960
E. Baton Rouge	E. Baton Rouge Parish Sheriff	-	-	-	X	C	80	80	0
E. Baton Rouge	Baton Rouge Police	-	-	-	X	O	1,280	640	640
Jefferson	Jefferson Parish Sheriff	-	-	-	X	C	1,280	800	480
Jefferson	Kenner Police	-	-	-	X	-	240	120	120
Lafayette	Lafayette Parish Sheriff	-	-	-	X	C	320	320	0
Lafayette	Lafayette Police	-	-	-	X	O	280	280	0
Lafourche	Lafourche Parish Sheriff	-	-	-	X	C	480	240	240
Livingston	Livingston Parish Sheriff	-	-	-	X	C	440	280	160
Orleans	New Orleans Police	-	-	-	X	M	1,920	1,040	880
Ouachita	Ouachita Parish Sheriff	-	-	-	X	C	360	360	0
Ouachita	Monroe Police	-	-	-	X	O	880	400	480
Rapides	Rapides Parish Sheriff	-	-	-	X	C	580	400	180
Rapides	Alexandria Police	-	-	-	X	S	1,440	480	960
St. Charles	St. Charles Parish Sheriff	-	-	-	X	C	480	240	240
St. John the Baptist	St. John the Baptist Sheriff	-	-	-	X	C	360	280	80
St. Tammany	St. Tammany Parish Sheriff	-	-	-	X	C	280	280	0
Tangipahoa	Tangipahoa Parish Sheriff	-	-	-	X	C	700	400	300

BEST COPY AVAILABLE

		Requirements for new officer recruits							
		Minimum educational requirement					Number of training hours required		
County	Name of agency	4-year college degree	2-year college degree	Some college*	High school diploma	Residency requirement	Total	Class	Field
MAINE									
Cumberland	Portland Police	.	.	.	X	.	640	480	160
MARYLAND									
Anne Arundel	Anne Arundel County Police	.	.	.	X	.	1,168	853	315
Anne Arundel	Annapolis Police	.	.	.	X	.	1,360	800	560
Baltimore(city)	Baltimore Police	.	.	.	X	M	1,158	948	210
Baltimore(city)	Baltimore School Police	.	.	.	X	M	880	800	80
Baltimore	Baltimore County Police	.	.	.	X	.	1,080	920	160
Charles	Charles County Sheriff	.	.	.	X	C	1,360	880	480
Harford	Harford County Sheriff	.	.	.	X	.	962	762	200
Howard	Howard County Police	.	.	.	X	.	1,380	800	580
Montgomery	Montgomery County Police	.	X	.	.	.	1,424	864	560
Prince George's	Prince George's County Police	.	.	.	X	O	1,116	964	152
Prince George's	Prince George's County Sheriff	.	.	.	X	.	965	805	160
MASSACHUSETTS									
Bristol	New Bedford Police	.	.	.	X	O	640	640	0
Essex	Lawrence Police	.	.	.	X	M	720	720	0
Essex	Lynn Police	.	.	.	X	M	720	720	0
Hampden	Chicopee Police	.	.	.	X	.	720	720	0
Hampden	Holyoke Police	.	.	.	X	O	16	16	0
Hampden	Springfield Police	.	.	.	X	.	480	480	0
Middlesex	Cambridge Police	.	.	.	X	M	560	520	40
Middlesex	Lowell Police	.	.	.	X	M	480	480	0
Middlesex	Newton Police	.	.	.	X	O	320	240	80
Middlesex	Somerville Police	.	.	.	X	M	1,760	720	1,040
Middlesex	Waltham Police	.	.	.	X	O	1,200	720	480
Norfolk	Brookline Police	.	.	.	X	.	720	640	80
Norfolk	Quincy Police	.	.	.	X	.	1,120	720	400
Plymouth	Brockton Police	.	.	.	X	M	520	520	0
Suffolk	Boston Police	.	.	.	X	O	1,040	580	460
Suffolk	Mass. Bay Transit Authority	.	.	.	X	S	1,040	720	320
Worcester	Worcester Police	.	.	.	X	.	580	580	0
MICHIGAN									
Calhoun	Battle Creek Police	.	.	X	.	O	520	0	520
Genesee	Flint Police	.	.	.	X	M	1,030	550	480
Ingham	Lansing Police	.	.	X	.	.	1,210	650	560
Kalamazoo	Kalamazoo Police	.	.	.	X	O	720	520	200
Kent	Kent County Sheriff	.	.	.	X	.	504	24	480
Kent	Grand Rapids Police	.	.	.	X	.	840	520	320
Macomb	Macomb County Sheriff	.	X	.	.	.	1,520	480	1,040
Macomb	Sterling Heights Police	.	.	X	.	C	1,120	480	640
Macomb	Warren Police	.	.	.	X	M	520	520	0
Oakland	Oakland County Sheriff	.	.	.	X	.	400	160	240
Oakland	Pontiac Police	.	X	.	.	M	440	440	0
Oakland	Southfield Police	.	.	.	X	.	1,280	640	640
Oakland	Troy Police	.	X	.	.	.	1,160	440	720
Saginaw	Saginaw Police	.	.	.	X	M	1,040	480	560
Washtenaw	Washtenaw County Sheriff	.	X	.	.	O	2,080	0	2,080
Washtenaw	Ann Arbor Police	.	.	X	.	.	1,440	880	560
Wayne	Dearborn Police	.	X	.	.	M	1,380	580	800
Wayne	Detroit Police	.	.	.	X	M	530	530	0
Wayne	Livonia Police	.	X	.	.	M	—	—	—
Wayne	Taylor Police	.	.	X	.	M	1,080	520	560
Wayne	Westland Police	.	.	.	X	.	1,280	520	760
MINNESOTA									
Hennepin	Minneapolis Police	.	X	.	.	M	1,120	320	800
Ramsey	Ramsey County Sheriff	.	X	.	.	O	960	480	480
Ramsey	St. Paul Police	.	X	.	.	.	400	400	0
St. Louis	Duluth Police	.	X	.	.	.	1,000	100	900
MISSISSIPPI									
Hinds	Jackson Police	.	.	.	X	C	1,440	480	960

Law Enforcement Management and Administrative Statistics, 1993

BEST COPY AVAILABLE

County	Name of agency	Requirements for new officer recruits							
		Minimum educational requirement							
		4-year college degree	2-year college degree	Some college*	High school diploma	Residency requirement	Number of training hours required		
							Total	Class	Field
MISSOURI									
Boone	Columbia Police	-	-	X	-	C	880	400	480
Greene	Springfield Police	-	-	X	-	S	1,300	800	500
Jackson	Independence Police	-	-	-	X	-	1,000	640	360
Jackson	Kansas City Police	-	-	-	X	M	1,290	850	440
Jefferson	Jefferson County Sheriff	-	-	-	X	C	240	120	120
St. Louis(city)	St. Louis Police	-	-	-	X	M	640	640	0
St. Louis	St. Louis County Police	-	-	-	X	S	1,120	640	480
MONTANA									
Yellowstone	Billings Police	-	-	-	X	-	1,100	540	560
NEBRASKA									
Douglas	Omaha Police	-	-	-	X	-	458	458	0
Lancaster	Lincoln Police	-	-	-	X	-	1,522	482	1,040
NEVADA									
Clark	Las Vegas Metropolitan Police	-	-	-	X	S	1,358	638	720
Clark	North Las Vegas Police	-	-	-	X	O	1,120	480	640
Washoe	Washoe County Sheriff	-	-	-	X	S	840	480	360
Washoe	Reno Police	-	-	-	X	-	1,160	600	560
NEW HAMPSHIRE									
Hillsborough	Manchester Police	-	-	-	X	O	1,040	840	200
Hillsborough	Nashua Police	-	-	-	X	-	1,000	800	200
NEW JERSEY									
Atlantic	Atlantic City Police	-	-	-	X	-	1,120	640	480
Bergen	Hackensack Police	-	-	-	X	M	820	780	40
Camden	Camden County Sheriff	-	-	-	X	C	80	40	40
Camden	Camden Police	-	-	-	X	S	600	480	120
Camden	Cherry Hill Police	X	-	-	-	-	1,440	880	560
Camden	Delaware River Port Authority	-	-	-	X	-	640	600	40
Cumberland	Vineland Police	-	-	-	X	-	800	640	160
Essex	Bloomfield Police	-	-	-	X	M	740	740	0
Essex	East Orange Police	-	-	-	X	-	720	640	80
Essex	Irvington Police	-	-	-	X	M	780	780	0
Essex	Newark Police	-	-	-	X	M	1,080	770	320
Hudson	Hudson County Sheriff	-	-	-	X	C	—	—	—
Hudson	Bayonne Police	-	-	-	X	M	640	640	0
Hudson	Hoboken Police	-	-	-	X	M	780	780	0
Hudson	Jersey City Police	-	-	-	X	M	810	810	0
Hudson	Kearny Police	-	-	-	X	S	840	800	40
Hudson	North Bergen Police	-	-	-	X	M	1,040	1,040	0
Hudson	Union City Police	-	-	-	X	M	940	840	100
Hudson	West New York Police	-	-	-	X	-	840	840	0
Mercer	Hamilton Township Police	-	-	-	X	O	640	340	300
Mercer	Trenton Police	-	-	-	X	M	800	680	120
Middlesex	Edison Police	-	-	-	X	-	120	30	90
Middlesex	New Brunswick Police	-	-	-	X	M	1,360	720	640
Middlesex	Perth Amboy Police	-	-	-	X	M	720	600	120
Middlesex	Woodbridge Police	-	-	-	X	M	1,780	780	1,000
Morris	Parsippany-Troy Hills Police	-	-	-	X	M	983	720	263
Ocean	Dover Township Police	-	X	-	-	-	880	360	520
Passaic	Clifton Police	-	-	-	X	S	1,008	808	200
Passaic	Passaic Police	-	-	-	X	M	800	600	200
Passaic	Paterson Police	-	-	-	X	M	720	670	50
Union	Elizabeth Police	-	-	-	X	M	800	800	0
Union	Linden Police	-	-	-	X	-	840	760	80
Union	Plainfield Police	-	-	-	X	M	1,180	860	320
Union	Union Township Police	-	-	-	X	M	780	780	0
NEW MEXICO									
Bernalillo	Bernalillo County Sheriff	-	-	-	X	-	1,120	800	320
Bernalillo	Albuquerque Police	-	-	X	-	-	2,080	1,040	1,040
Dona Ana	Las Cruces Police	-	-	-	X	-	1,230	630	600
Santa Fe	Santa Fe Police	-	-	-	X	-	1,150	620	530

County	Name of agency	Requirements for new officer recruits: Minimum educational requirement: 4-year college degree	2-year college degree	Some college*	High school diploma	Residency requirement	Number of training hours required: Total	Class	Field
NEW YORK									
Albany	Albany Police	-	-	-	X	M	1,240	680	560
Albany	Colonie Police	-	-	X	-	-	1,240	760	480
Broome	Binghamton Police	-	-	-	X	M	840	680	160
Erie	Erie County Sheriff	-	-	X	-	C	1,240	800	440
Erie	Amherst Police	-	-	X	-	M	1,340	860	480
Erie	Buffalo Police	-	-	-	X	M	840	800	40
Erie	Cheektowaga Police	-	X	-	-	M	1,302	742	560
Erie	Tonawanda Police	-	-	X	-	M	600	440	160
Monroe	Monroe County Sheriff	-	-	X	-	C	1,548	748	800
Monroe	Rochester Police	-	-	-	X	-	1,160	480	680
Nassau	Nassau County Police	-	-	X	-	O	1,323	1,083	240
New York City	New York City Police	-	-	-	X	M	915	915	0
New York City	New York City Sheriff	-	-	X	-	M	129	129	0
New York City	New York City Fire Department	-	-	-	X	O	1,622	380	1,242
New York City	New York City Housing Police	-	-	-	X	O	1,500	1,220	280
New York City	New York City School Police	-	-	-	X	-	—	—	—
New York City	New York City Social Services	-	-	-	X	-	280	280	0
New York City	New York City Transit Police	-	-	-	X	O	1,040	920	120
New York City	Long Island Railroad Police	-	-	-	X	-	835	795	40
New York City	Metro-North Railroad Police	-	-	-	X	-	794	794	0
New York City	Port Authority of NY-NJ	-	-	-	X	S	900	700	200
Niagara	Niagara Falls Police	-	-	-	X	M	1,400	760	640
Onondaga	Onondaga County Sheriff	-	-	-	X	C	1,472	712	760
Onondaga	Syracuse Police	-	-	-	X	O	1,180	700	480
Rensselaer	Troy Police	-	-	-	X	-	760	680	80
Rockland	Clarkstown Police	-	-	-	X	M	1,160	680	480
Rockland	Ramapo Police	-	-	-	X	-	1,360	1,040	320
Schenectady	Schenectady Police	-	-	-	X	M	1,360	800	560
Suffolk	Suffolk County Police	-	-	-	X	-	1,295	875	420
Suffolk	Suffolk County Sheriff	-	-	-	X	C	1,892	1,322	570
Westchester	Westchester County Police	-	-	-	X	S	640	600	40
Westchester	Mt. Vernon Police	-	-	-	X	-	320	0	320
Westchester	New Rochelle Police	-	-	-	X	O	640	480	160
Westchester	White Plains Police	-	-	-	X	O	1,280	880	400
Westchester	Yonkers Police	-	-	-	X	M	—	—	—
NORTH CAROLINA									
Buncombe	Buncombe County Sheriff	-	-	-	X	C	1,006	506	500
Buncombe	Asheville Police	-	-	-	X	O	1,170	610	560
Cumberland	Cumberland County Sheriff	-	-	-	X	C	720	560	160
Cumberland	Fayetteville Police	-	-	-	X	S	656	96	560
Durham	Durham County Sheriff	-	-	-	X	C	1,000	520	480
Durham	Durham Police	-	-	-	X	O	906	831	75
Forsyth	Winston-Salem Police	-	-	-	X	C	890	380	510
Gaston	Gastonia Police	-	-	-	X	O	1,106	506	600
Guilford	Greensboro Police	-	-	-	X	O	1,265	677	588
Guilford	High Point Police	-	-	-	X	O	1,096	508	588
Mecklenburg	Charlotte Police	-	-	-	X	O	640	465	175
Nash	Rocky Mount Police	-	-	-	X	O	1,080	600	480
New Hanover	Wilmington Police	-	-	-	X	O	—	483	—
Pitt	Greenville Police	-	-	-	X	C	640	400	240
Wake	Raleigh Police	-	-	-	X	O	1,640	840	800
OHIO									
Butler	Hamilton Police	-	-	-	X	O	544	544	0
Clark	Springfield Police	-	-	-	X	C	1,080	760	320
Cuyahoga	Cleveland Police	-	-	-	X	M	785	725	60
Franklin	Franklin County Sheriff	-	-	-	X	-	—	340	—
Franklin	Columbus Police	-	-	-	X	O	1,320	960	360
Hamilton	Hamilton County Sheriff	-	-	-	X	C	820	780	40
Hamilton	Cincinnati Police	-	-	-	X	C	1,280	800	480
Lucas	Toledo Police	-	-	X	-	M	880	880	0
Mahoning	Youngstown Police	-	-	-	X	M	—	520	—
Montgomery	Montgomery County Sheriff	-	-	-	X	O	984	504	480
Montgomery	Dayton Police	-	-	-	X	M	1,015	936	80
Stark	Canton Police	-	-	-	X	C	600	560	40
Summit	Summit County Sheriff	-	-	-	X	S	566	494	72
Summit	Akron Police	-	-	-	X	M	520	480	40

Law Enforcement Management and Administrative Statistics, 1993

BEST COPY AVAILABLE

		Requirements for new officer recruits							
		Minimum educational requirement							
County	Name of agency	4-year college degree	2-year college degree	Some college*	High school diploma	Residency requirement	Number of training hours required Total	Class	Field
OKLAHOMA									
Cleveland	Norman Police	-	-	X	-	O	1,120	640	480
Comanche	Lawton Police	-	-	X	-	S	1,440	720	720
Oklahoma	Oklahoma City Police	-	-	-	X	-	1,268	708	560
Tulsa	Tulsa County Sheriff	-	-	-	X	C	300	300	0
Tulsa	Tulsa Police	-	-	X	-	-	1,680	840	840
OREGON									
Clackamas	Clackamas County Sheriff	-	-	-	X	-	1,040	320	720
Lane	Lane County Sheriff	-	-	-	X	-	520	360	160
Lane	Eugene Police	-	-	-	X	O	960	480	480
Marion	Salem Police	-	-	-	X	-	840	320	520
Multnomah	Portland Police	-	-	-	X	-	3,096	960	2,136
Washington	Washington County Sheriff	-	-	-	X	-	960	320	640
PENNSYLVANIA									
Allegheny	Allegheny County Police	-	-	-	X	C	520	520	0
Allegheny	Pittsburgh Police	-	-	-	-	M	1,200	720	480
Berks	Reading Police	-	-	-	X	-	1,000	520	480
Dauphin	Harrisburg Police	-	-	-	X	-	1,160	600	560
Erie	Erie Police	-	-	-	X	O	640	640	0
Lackawanna	Scranton Police	-	-	-	X	M	—	560	—
Lancaster	Lancaster Police	-	-	-	X	O	1,840	400	1,440
Lehigh	Allentown Police	-	-	-	X	-	680	520	160
Montgomery	Lower Merion Township Police	-	-	-	X	O	1,040	640	400
Philadelphia	Philadelphia Police	-	-	-	X	M	716	716	0
Philadelphia	Philadelphia Housing Police	-	-	-	X	O	800	800	0
Philadelphia	S.E. Penn. Transit Authority	-	-	-	X	-	1,520	800	720
RHODE ISLAND									
Kent	Warwick Police	-	X	-	-	-	480	400	80
Providence	Cranston Police	-	-	-	X	S	880	560	320
Providence	Pawtucket Police	-	-	-	X	-	740	560	180
Providence	Providence Police	-	-	-	X	M	2,000	2,000	0
SOUTH CAROLINA									
Beaufort	Beaufort County Sheriff	-	-	-	X	C	48	40	8
Charleston	Charleston County Sheriff	-	-	-	X	-	640	320	320
Charleston	Charleston Police	-	-	-	X	-	800	320	480
Charleston	North Charleston Police	-	-	-	X	M	800	320	480
Greenville	Greenville County Sheriff	-	-	-	X	-	720	320	400
Greenville	Greenville Police	-	-	-	X	-	2,080	320	1,760
Horry	Horry County Police	-	-	-	X	-	480	400	80
Lexington	Lexington County Sheriff	-	-	-	X	-	600	40	560
Richland	Richland County Sheriff	X	-	-	-	-	160	160	0
Richland	Columbia Police	-	-	-	X	S	618	320	298
Spartanburg	Spartanburg County Sheriff	-	-	-	X	-	300	200	100
Spartanburg	Spartanburg Police	-	-	-	X	C	640	320	320
SOUTH DAKOTA									
Minnehaha	Sioux Falls Police	-	-	-	X	O	1,040	560	480
TENNESSEE									
Davidson	Nashville Metropolitan Police	-	-	X	-	C	1,920	880	1,040
Hamilton	Hamilton County Sheriff	-	-	-	X	C	400	320	80
Hamilton	Chattanooga Police	-	-	-	X	S	1,240	680	560
Knox	Knox County Sheriff	-	-	-	X	-	400	400	0
Knox	Knoxville Police	-	-	-	X	-	880	880	0
Madison	Jackson Police	-	-	-	X	C	320	320	0
Montgomery	Clarksville Police	-	-	-	X	C	480	80	400
Shelby	Shelby County Sheriff	-	-	-	X	C	480	480	0
Shelby	Memphis Police	-	-	X	-	C	640	640	0
Washington	Johnson City Police	-	-	-	X	O	1,240	520	720

BEST COPY AVAILABLE

County	Name of agency	Requirements for new officer recruits							
		Minimum educational requirement							
		4-year college degree	2-year college degree	Some college*	High school diploma	Residency requirement	Number of training hours required		
							Total	Class	Field
TEXAS									
Bell	Killeen Police	-	-	X	-	-	1,120	560	560
Bexar	Bexar County Sheriff	-	-	-	X	-	520	440	80
Bexar	San Antonio Police	-	-	-	X	-	1,750	1,070	680
Brazoria	Brazoria County Sheriff	-	-	-	X	-	1,080	600	480
Cameron	Brownsville Police	-	-	-	X	-	440	440	0
Collin	Plano Police	-	-	-	X	C	1,210	650	560
Dallas	Carrollton Police	-	-	X	-	-	963	835	128
Dallas	Dallas Police	-	-	X	-	-	1,804	1,000	804
Dallas	Dallas-Ft. Worth Airport Police	-	-	-	X	-	1,017	1,017	0
Dallas	Garland Police	-	-	-	X	-	1,560	920	640
Dallas	Grand Prairie Police	-	X	-	-	-	1,160	480	680
Dallas	Irving Police	-	-	-	X	-	1,380	780	600
Dallas	Mesquite Police	-	-	-	X	-	1,520	880	640
Dallas	Richardson Police	-	-	-	X	S	720	400	320
Denton	Denton Police	-	-	X	-	-	960	400	560
Ector	Odessa Police	-	-	-	X	O	780	180	600
El Paso	El Paso County Sheriff	-	-	-	X	C	1,780	800	980
El Paso	El Paso Police	-	-	-	X	-	720	704	16
Fort Bend	Fort Bend County Sheriff	-	-	-	X	-	1,120	600	520
Galveston	Galveston County Sheriff	-	-	-	X	C	400	400	0
Galveston	Galveston Police	-	-	-	X	C	800	480	320
Gregg	Longview Police	-	-	-	X	-	1,200	640	560
Harris	Harris County Sheriff	-	-	-	X	-	820	640	180
Harris	Baytown Police	-	-	X	-	-	1,200	720	480
Harris	Houston Police	-	-	X	-	-	1,680	1,040	640
Harris	Pasadena Police	-	-	-	X	-	1,490	770	720
Hidalgo	McAllen Police	-	-	-	X	-	1,323	643	680
Jefferson	Beaumont Police	-	-	-	X	-	1,280	400	880
Jefferson	Port Arthur Police	-	-	-	X	-	960	480	480
Lubbock	Lubbock Police	-	-	-	X	-	1,240	640	600
McLennan	Waco Police	-	-	-	X	-	1,278	798	480
Midland	Midland Police	-	-	X	-	-	1,320	640	680
Montgomery	Montgomery County Sheriff	-	-	-	X	-	720	400	320
Nueces	Corpus Christi Police	-	-	-	X	O	1,680	880	800
Potter	Amarillo Police	-	-	-	X	-	1,360	720	640
Smith	Tyler Police	-	-	X	-	-	960	400	560
Tarrant	Tarrant County Sheriff	-	-	-	X	O	180	180	0
Tarrant	Arlington Police	X	-	-	-	O	1,580	1,000	580
Tarrant	Fort Worth Police	-	-	-	X	O	1,440	800	640
Taylor	Abilene Police	-	-	-	X	O	1,320	840	480
Tom Green	San Angelo Police	-	-	-	X	-	1,180	600	580
Travis	Travis County Sheriff	-	-	-	X	-	1,040	400	640
Travis	Austin Police	-	-	X	-	-	1,528	1,048	480
Webb	Laredo Police	-	-	-	X	M	1,240	600	640
Wichita	Wichita Falls Police	-	-	-	X	O	1,440	720	720
UTAH									
Salt Lake	Salt Lake County Sheriff	-	-	-	X	C	940	510	430
Salt Lake	Salt Lake City Police	-	-	-	X	-	1,200	720	480
Weber	Ogden Police	-	-	-	X	O	360	40	320
VIRGINIA									
Alexandria(city)	Alexandria Police	-	-	-	X	-	1,120	560	560
Arlington	Arlington County Police	-	X	-	-	-	920	520	400
Chesapeake(city)	Chesapeake Police	-	-	-	X	-	821	761	60
Chesterfield	Chesterfield County Police	-	-	-	X	-	1,280	920	360
Fairfax	Fairfax County Police	-	-	-	X	-	1,104	704	400
Hampton(city)	Hampton Police	-	-	-	X	-	800	480	320
Henrico	Henrico County Police	-	-	-	X	-	1,480	1,160	320
Loudoun	Loudoun County Sheriff	-	-	-	X	O	963	783	180
Lynchburg(city)	Lynchburg Police	-	-	-	X	-	680	520	160
Newport News(city)	Newport News Police	-	-	-	X	-	940	440	500
Norfolk(city)	Norfolk Police	-	-	-	X	-	1,280	800	480
Portsmouth(city)	Portsmouth Police	-	-	-	X	-	1,040	720	320
Prince William	Prince William County Police	-	-	-	X	-	1,160	600	560
Richmond(city)	Richmond City Police	-	-	-	X	-	1,240	1,040	200
Roanoke(city)	Roanoke City Police	-	-	-	X	-	1,720	520	1,200
Virginia Beach(city)	Virginia Beach Police	-	-	-	X	-	1,300	880	420

Law Enforcement Management and Administrative Statistics, 1993

BEST COPY AVAILABLE

		Requirements for new officer recruits							
		Minimum educational requirement							
County	Name of agency	4-year college degree	2-year college degree	Some college*	High school diploma	Residency requirement	Number of training hours required		
							Total	Class	Field
WASHINGTON									
Clark	Clark County Sheriff	.	.	.	X	.	1,386	803	793
King	King Co. Dept. of Public Safety	.	.	.	X	.	1,088	580	528
King	Bellevue Police	.	X	.	.	.	1,180	700	480
King	Seattle Police	.	.	.	X	.	1,040	440	600
Pierce	Pierce County Sheriff	.	.	.	X	C	1,080	800	480
Pierce	Tacoma Police	.	.	.	X	.	1,080	440	640
Snohomish	Snohomish County Sheriff	.	.	.	X	S	920	440	480
Snohomish	Everett Police	.	.	.	X	.	1,824	1,320	504
Spokane	Spokane County Sheriff	.	.	.	X	.	1,088	440	628
Spokane	Spokane Police	.	.	X	.	.	1,440	440	1,000
Yakima	Yakima Police	.	.	.	X	O	1,120	440	680
WEST VIRGINIA									
Kanawha	Charleston Police	.	.	.	X	O	818	498	320
WISCONSIN									
Brown	Brown County Sheriff	.	.	.	X	.	400	400	0
Brown	Green Bay Police	.	X	.	.	M	400	400	0
Dane	Dane County Sheriff	.	.	X	.	.	—	498	—
Dane	Madison Police	.	.	.	X	.	1,330	880	450
Kenosha	Kenosha Police	.	X	.	.	C	1,040	400	640
Milwaukee	Milwaukee Police	.	.	.	X	M	827	824	3
Milwaukee	West Allis Police	.	X	.	.	M	1,120	120	1,000
Racine	Racine County Sheriff	.	.	X	.	C	520	520	0
Racine	Racine Police	.	.	.	X	S	—	320	—
Waukesha	Waukesha County Sheriff	.	.	.	X	C	1,440	400	1,040

*Nondegree college requirements only

Codes for residency requirements are as follows:

"C"=Within county
"M"=Within municipality
"S"=Within State
"O"=Other requirement
" . "=No requirement

—Data were not reported by an agency.

BEST COPY AVAILABLE

REFERENCES

REFERENCES

Abshire, C.M. (1995). *A comparison of organizational norms held by police officers vs. other municipal workers in large and small Cities.* Unpublished master's thesis, Stephen F. Austin State University, Nacogdoches, Texas.

Adams, R.E. (1998). *Factors relating to academy performance on the Texas state law enforcement licensing examination.* Manuscript to be submitted for publication.

Alber, J.A. (1995). *A comparison of conflict management styles chosen by police cadets during three phases of police academy.* Unpublished master's thesis, University of Houston, Houston, Texas.

Association of the United States Army News. (1997). U.S. Army still needs high quality soldiers. *AUSA NEWS, 19* (9), 12.

Association of the United States Army News. (1997). Army emphasizes soldier values. *AUSA NEWS, 20* (1), 11.

Borg, W.R., & Gall, M. D. (1996). *Educational research: An instruction.* White Plains, New York: Longinan.

Breci, M.G. (1994). Higher education for law enforcement—Minnesota model. FBI Law Enforcement Bulletin, 62 (1), 1.

Brown, L.P. (1989). Higher education requirements in the Houston police academy. HPD cadet class curriculum. Houston: Houston Police Department.

Brown, L.P. (1988). Excellence in policing. Police Chief, 60 (4), 68-76.

Brown, L.P. (1992). Violent crime and community involvement. FBI Law Enforcement Bulletin, 61 (5), 2-5.

Brown, L.P. (1975). Memorandum for generalist investigator: An empirical assessment. United States Department of Justice: Law Enforcement Assistance Administration. Portland: Multnomah County Oregon Sheriffs Office.

Brown, L.P. (1988). Philosophy of policing. Developing neighborhood oriented policing. Alexandria: IACP.

Brown, L.P. (1988). Credentials in higher education. Developing neighborhood oriented policing. Alexandria: IACP.

Brown L.P. (1989). In D.L. Carter, A.D. Sapp. & D.W. Stephens. Higher education as a prerequisite for police. The state of police education: Policy for the 21st century. Washington DC: Police Executive Research Forum.

Bumgarner, M.I. (1993). Heroes for hire, hiring military Veterans for police officers. Police Chief, 60 (4), 19-21.

Campa, E.E. (1993). The relationship of reading comprehension and educational achievement levels to academy and field training performance of police cadets. Doctoral dissertation, Texas A&M University, College Station, Texas.

Carter, D.L., Sapp, A.D., & Stephens, D.W. (1989). Literature findings on the benefits on higher education for police officers. The state of police education: Policy for the 21st century. Washington, DC: Police Executive Research Forum.

Carter, D.L., Sapp, A.D., & Stephens, D.W. (1989). National commissions on the benefits of higher education for officers. The state of police education: Policy for the 21st century. Washington, DC: Police Executive Research Forum.

Carter, D.L., & Sapp, A.D. (1991). Police education & minority recruitment. Washington, DC: Police Executive Research Forum.

Dantzker, M.L. (1995). Higher education and policing Subject to Debate, 9 (12), 1.

Davis v. Dallas, 777 F.2nd 205 (5th Cir. 1985).

Delattre, E.J. (1994). Fine applicants, rigorous training/education, high standards. Character & cops: Ethics in policing. Washington DC: AEI.

Emmons, D., & Nutt, L.(1995). Values education and the criminal justice curriculum. Journal of Criminal Justice Education, 6 (1), 146.

Ferguson, G.A., & Takane, T. (1989). Statistical testing. Statistical analysis in psychology and education. New York: McGraw-Hill.

Ferreira, B.R. (1997). The importance of law enforcement education. Law and Order, 45 (5), 26.

Geller, W. (1991). Higher education, recruitment, and selection. Local government police management. Washington DC: ICMA Press.

Goldstein, H. (1977). Rules, policies, and guidelines. Policing in a free society. Cambridge: Ballinger.

Goldstein, H. (1990). Intellectual capacity to function independently. Problem oriented policing. New York: McGraw-Hill.

Gottron, M.V. (1991). Education in the workplace: The military experience. Washington, DC: U.S. Government Printing Office.

Grant, J.D., & Grant, J. (1995). Officer selection and the prevention of abuse of force. In W. Geller, & H. Toch, (Eds.), And justice for all. Washington, DC: Police Executive Research Forum.

Hair, D.G. (1992). Houston's chiefs: Education and experience. History of the Houston police department. Houston: Houston Police Department.

Heffernan, W.C., & Stroup, T. (1985). Police ethics: Hard choices in law enforcement. New York: John Jay Press.

Heidingfield, M. (1995). Six reasons to require college education for police officers Subject to Debate, 9 (12) 5.

Houston Police Academy. (1994). State licensing examination requirements. Cadet code of conduct. Houston: Houston Police Department.

Houston Police Academy. (1994). Civil service examination. Cadet code of conduct. Houston: Houston Police Department.

Houston Police Academy. (1994). Academic average scores. Cadet code of conduct. Houston: Houston Police Department.

Houston Police Academy. (1994). Drivers training scores. Cadet code of conduct. Houston: Houston Police Department.

Houston Police Academy. (1994). Firearms training scores. Cadet code of conduct. Houston: Houston Police Department.

Houston Police Recruiting. (1994). Higher education & military and other hiring requirements, Recruiting fact sheet. Houston: Houston Police Department.

Hoyt, A. (1993). Today's military: Scoring high points in education. Army Employer and Alumni Network, 1 (4), 1.

Jeanneret, P.R., & Dubin, J.A. (1977). Education & reading comprehension requirements for Houston police officers. Validity study of police officer selection. Houston: Lifson, Wilson, Ferguson, & Winick.

Johnson, S.A. (1994). ASPIRES: A solution to a mid-career plateau. FBI Law Enforcement Bulletin, 63 (4), 1.

Jones, A.V. (1994). A comparison of officer behavior when training with blanks versus simunition. Unpublished master's thesis, Sam Houston State University, Huntsville, Texas.

Kerlinger, F.N. (1986). Foundations of behavioral research. (3rd ed.). New York: Holt, Rinehart & Winston.

Kessler, F.A. (1994). An empirical study of the effectiveness of role modeling by police personnel of true police duties to influence the entry level cadet's perceptions of law enforcement duties. Unpublished master's thesis, Sam Houston State University, Huntsville, Texas.

Kindel, J.E. (October 2, 1997). Military service vs. higher education. Houston, Texas.

Levin, B.H., & Broadfoot, P.A. (1996). A call for better-educated officers. Police Futurist, 4 (2), 11.

Linkins, J.R. (1995). Training for the future: The IADLEST source book of standards and training. FBI Law Enforcement Bulletin, #56022.

McKay, B.W. (1996). Recruit practices. TELEMASP Bulletin, 3 (6), 11.

Mahony, D. & Prenzler, T. (1996). Police studies, the university and the police service: An Australian study. Journal of Criminal Justice Education, 7 (2), 301.

Mangum, S.L.& Ball, D.E. (1990). Competitive skill transfer: Military, higher education. Experience for hire. Washington DC: U.S. Government Printing Office.

Oettmeier, T.N. (1982). A descriptive analysis of a successful Houston police officer. Internal analysis and statistical report. Houston: Houston Police Department.

O'Keefe, J. (1989). An empirical analysis of high speed police pursuits. Doctoral dissertation, Sam Houston State University, Huntsville, Texas.

Patterson, D. E. (1991). College educated police officers: Some impacts on the internal organization. Law and Order, 39 (11), 68-71.

Phelps, R. (October 9, 1997). Reading comprehension scores. Houston Police Academy: Houston, Texas.

Pollock, J.M. (1994). Ethics in crime and justice: Dilemmas and decisions. Belmont, CA: Wadsworth.

Reaves, B.A., & Smith, P.Z. (1995). Law enforcement management and administrative statistics, 1993: Data for individual state and local agencies with 100 or more officers. Washington DC: U.S. Government Printing Office.

Redeaux, M. (October 30, 1997). Troops to COPS grant program. (Telephonic conversation). Houston Police Department: Houston, Texas.

Reich, R. (1994). American renewal & higher education. Liberal Education, 80 (2), 6.

Reno, W.H. (1991). Military education and training. Policy forum: Business, the military and the new work force proceedings. Fort Myer, VA: Department of the Army.

Robinson, J.(1991, February 7). HPD ordered to make higher education waiver for military service. Houston Chronicle. p. A8.

Roos J.G. (1997, September). Back in green, educational curriculum. Armed Forces Journal. 22.

Sanchez, J.C. (1996). College education in law enforcement: The current status. Texas Police Journal. 44 (1), 17.

Sanchez, J.C. (1996). College education in law enforcement: The current status. Texas Police Journal. 44 (2), 1-3.

Sander, K. (October 3, 1997). State licensing scores. Austin, Texas.

Saunders, C.B. (1983). Upgrading the American police. In H.W. More, Critical issues in policing. San Jose: Anderson.

Steeples, D. (1995). The meaning of the baccalaureate degree. Liberal Education. 81 (4), 62.

Stephens, D.W. (1990). Policing in the future. American Journal of Police. 9 (3), 151-159.

Stroup T.G. (1996). America's soldiers: Presenting our nations best. Army. 46 (10) 144.

Swanson, C.R., Territo, L., & Taylor, R.W. (1988). Higher education in law enforcement. Police administration. New York: Macmillian.

Texas commission on law enforcement officers standards and education. (1995). Complete officer statistical program: Education levels. Austin: State Printing Office.

Texas commission on law enforcement officers standards and education. (1997). Basic peace officer course. Austin: State Printing Office.

Trojanowicz, R., & Bucqueroux, B. (1994). Police as social servants. Community policing. Cincinnati: Anderson.

U.S. Department of Justice. (1995). Troops to cops grant: Program information fact sheet. Washington, DC: Government Printing Office.

Webb, F. (1994). Training classified officers in the Houston police department. Trainer, 2 (1), 33-56.

Westmeyer, P. (1985). A history of American higher education. Springfield: Thomas Publishing.

Williams, H. (1992). Reconciling higher educational standards and minority recruitment: The New York City model. Police Foundation Report, 9 (1), 2.